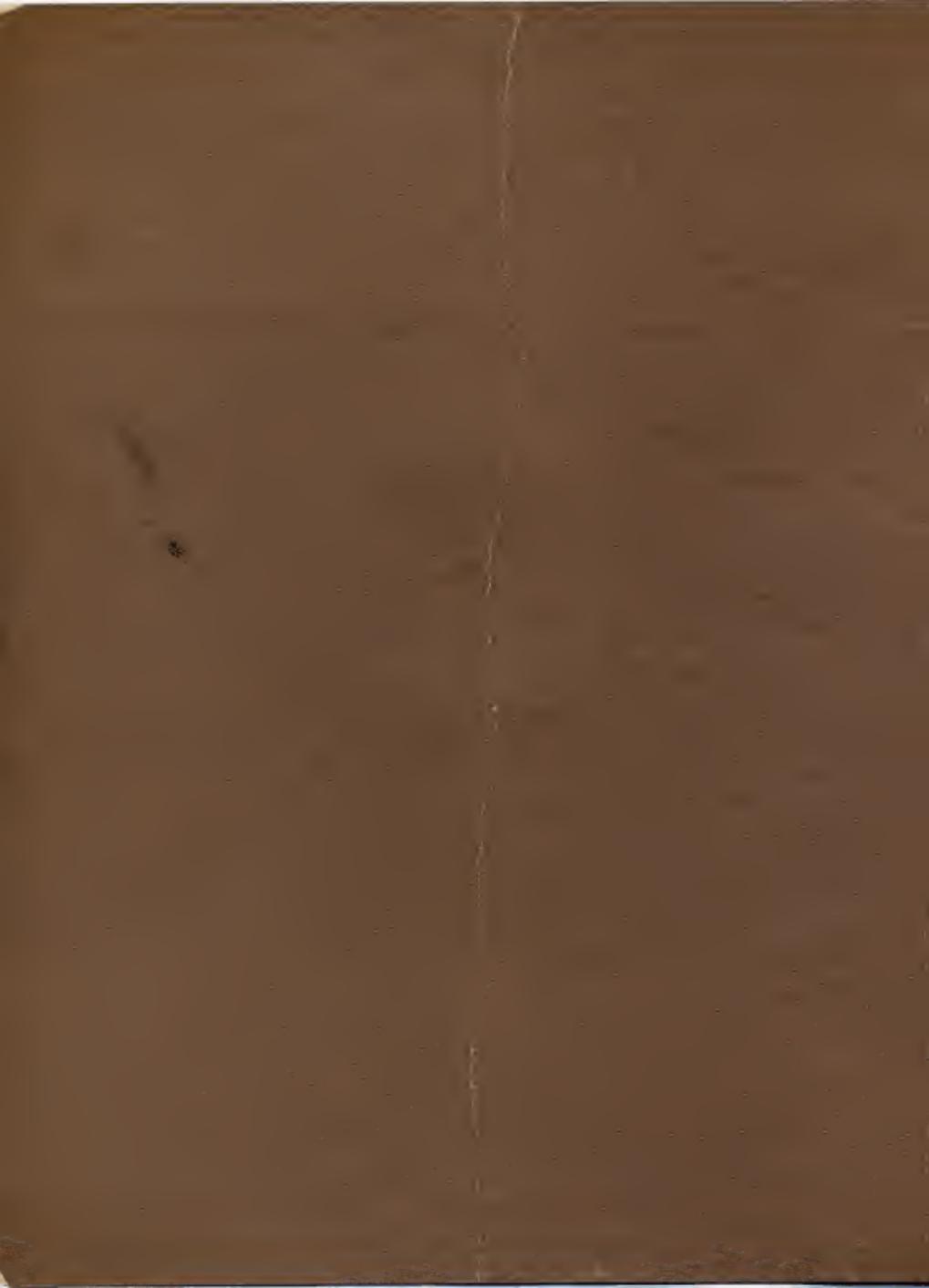
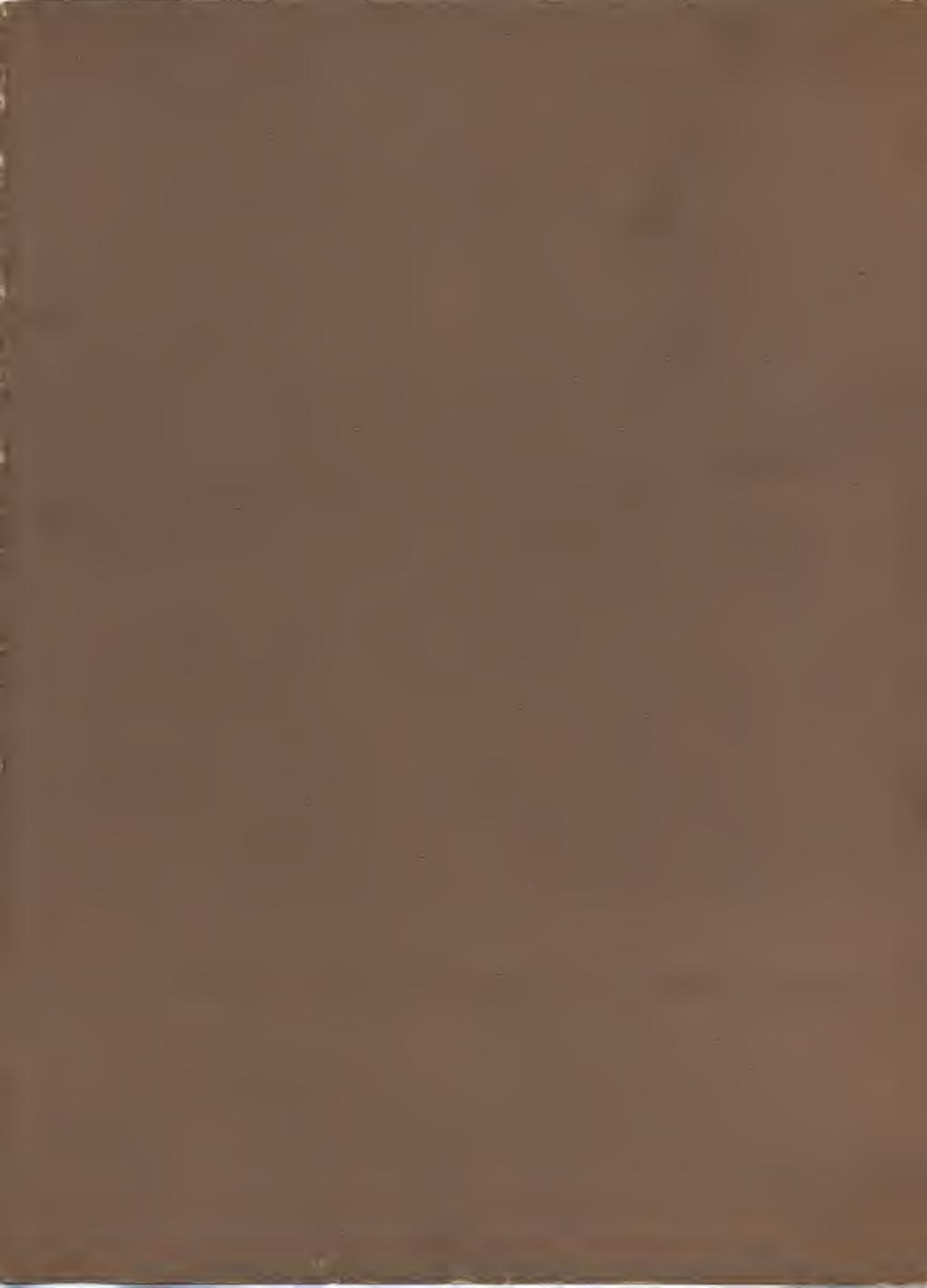
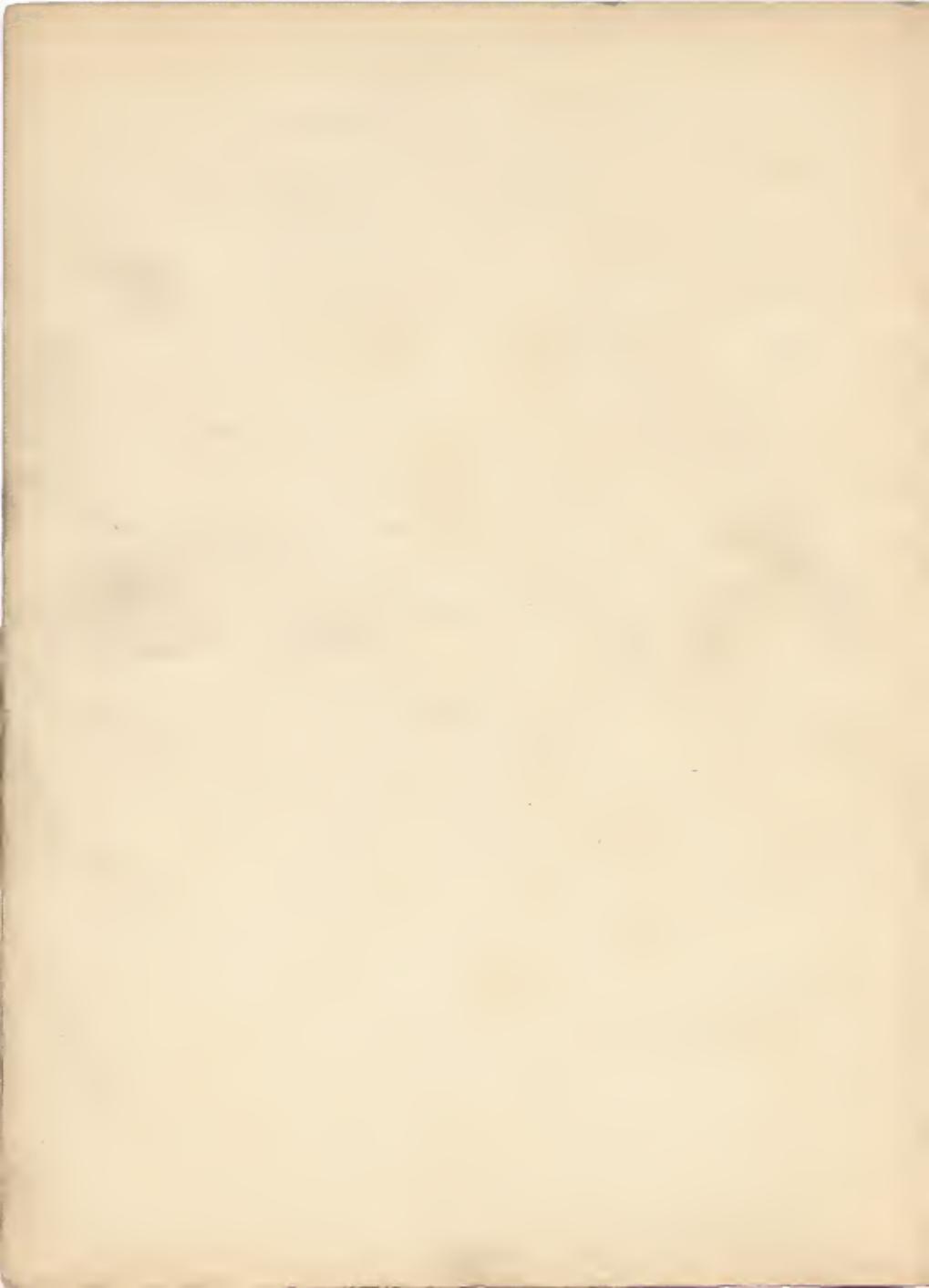


# MILLER SAW-TRIMMERS









*Miller*  
*Saw-Trimmers*



*Upper Left*—Miller "Heavy-Duty" Saw-Trimmer  
*Upper Right*—Miller "Universal" Saw-Trimmer  
*Lower Left*—Miller "Special-Purpose" Saw-Trimmer  
*Lower Right*—Miller "Printer's Bench" Saw-Trimmer

# MILLER

## SAW-TRIMMERS

### & SPECIAL ATTACHMENTS

MILLER UNIVERSAL SAW-TRIMMER  
MILLER HEAVY-DUTY SAW-TRIMMER  
MILLER SPECIAL-PURPOSE SAW-TRIMMER  
MILLER PRINTER'S BENCH SAW-TRIMMER

*Standardizing Machines  
for the Composing Room*



FIFTH EDITION  
Revised July, 1927

CABLE ADDRESS: "MILLERSAW, PITTSBURGH"

## MILLER SAW-TRIMMER COMPANY

PITTSBURGH, U. S. A.

### BRANCHES:

ATLANTA, 29 Walton St.  
DETROIT, 625 Wayne St.  
NEW YORK, 60 Berkman St.

BOSTON, 601 Atlantic Ave.  
LOS ANGELES, 300 E. Fourth St.  
PHILADELPHIA, 141-143 N. 12th St.

CHICAGO, 40 S. Clinton St.  
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DALLAS, 929 S. Akard St.  
MINNEAPOLIS, 413 S. Fifth St.  
SAN FRANCISCO, 613 Howard St.

### FOREIGN BRANCH OFFICES:

Latin America  
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New York, N. Y.

N. V. Lettergeselsch."Amsterdam"  
Amsterdam, Holland

Canada (Except B. C.)  
Miller & Richard  
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Lamson Monotype Corporation, Ltd.  
London, E. C. 4, England

Hijo De Miguel Maire  
Barcelona, Spain

Claf Galowsen  
Kristiansand, Norway

Robert Fulton & Co.  
Yokohama, Japan

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Manila, P. I.

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Sydney, Australia

Establishments "Plantin"  
Brussels, Belgium

W. J. Mack, Ltd.  
Dunedin, New Zealand



INTERIOR VIEWS AT THE GREAT MILLER FACTORY

## THE MILLER SAW-TRIMMER COMPANY

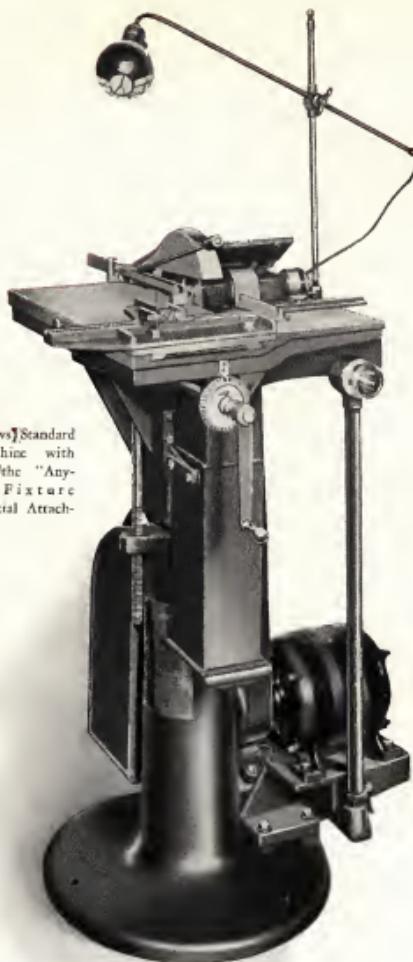
HE progress of the MILLER SAW-TRIMMER COMPANY from a small beginning in 1910, to the industrial dominance of our particular field, is but a reflection of the merits of the Miller product. The first Miller Saw-Trimmers were built in a small one-story structure, employing less than a dozen workmen. One traveling salesman, an office man and a stenographer constituted our sales force. Today we occupy a large modern factory building of eight stories and a large up-to-date foundry; employ upward of a thousand skilled mechanics in our shops and maintain an office force of two hundred trained executives. Branch selling houses are established in a number of the principal cities of the United States, each office having its own efficient corps of office help, traveling salesmen and demonstrators. We are represented by reliable selling agents in all foreign countries.

Back of this achievement stands the Miller Saw-Trimmer, the foundation of our success. Printers at once recognized it as a tool of wonderful productivity and a means of greater economy and efficiency in printing house methods. The resultant demand for Saw-Trimmers, as well as for other Miller Machines introduced from time to time, explains our growth—all the more gratifying to us because it also symbolizes the growth or prospective growth of every live printer who owns or expects to own one or more of these dividend-paying Miller machines.

To build a product of exceptional value at a price which large volume production alone makes possible, is the Miller idea. The big Miller factory at Pittsburgh is admirably adapted to this purpose. It is completely equipped with the latest development in machine-making tools, each one designed to perform some special operation. The entire course of work through the factory is perfectly routed to fit in with Miller manufacturing methods. Overhead cost is cut to the minimum, while the quality and quantity of manufacture is ever increasing in the endeavor to keep pace with the demand for Miller machines.

All the resources of the Miller Saw-Trimmer Company are available at each of the Miller Branches listed on title page, where a complete line of accessories and repair parts are carried in stock and where Miller users can obtain prompt and efficient "expert service" at all times. No printer is at a disadvantage on account of location.

"Service" is the watchword of the Miller organization.



This view shows Standard Equipped Machine with exceptions of the "Any-angle" Lighting Fixture which is a Special Attachment.

## MILLER UNIVERSAL SAW-TRIMMER

<i>Code:</i>	<i>Above</i>	Miller Universal Saw-Trimmer including parts shown on page 11 and any motor listed on page 45, price.....	\$475.00
	<i>Ababs</i>	Miller Universal Saw-Trimmer without motor, price.....	435.00
	<i>Abaco</i>	Miller Universal Saw-Trimmer with countershaft, price.....	453.00

### SPECIFICATIONS

Speed of saw arbor, 3600 r. p. m.; diameter of pulley, 2".  
Dimensions of sliding table, 9" x 20"; tables over all, 16" x 20".

Prices are F. O. B. Pittsburgh and are subject to Change Without Notice.  
Supersedes Prices in all Previous Editions.

## THE MILLER SAW-TRIMMER AND ITS SCOPE OF OPERATION



THE MILLER SAW-TRIMMER has become an indispensable part of the equipment of every modern composing room. It is the only machine that saws and trims in one operation, gauging absolutely to the American Point System. (Gauges cut to the Didot Point System on request without extra cost.) The combination of a saw blade and a trimmer head in one, so that they act simultaneously, is the basic principle of the machine. The saw and trimmer are mounted on the same mandrel, with the trimmer knives projecting through the saw blade. The knives, when changed for sharpening, may be accurately re-adjusted in a few moments.

The micrometer gauge is adjustable to points and fractions of points by simply turning the knurled worm. The right-hand graduations on worm gauges lengths; the left-hand graduations, used in conjunction with batter, gauges miters. To change the adjustment quickly, the gauge may be lifted free from the rack and moved forward or backward quickly as in the ordinary quick-acting vise. It locks automatically when dropped back into place.

The table slides freely and every provision is made for wear, insuring permanent accuracy. The main tables of the Universal and Heavy-Duty Saw-Trimmers are equipped with an elevating mechanism whereby the tables are raised and lowered in relation to the saw-head. This mechanism is controlled by a micrometer point dial marked by points and half points up to two picas for one revolution. The Special-Purpose and Bench Saw-Trimmers are not equipped with table elevating mechanism, this being an exclusive feature with the Universal and Heavy-Duty.

All ordinary operations are easily taken care of with the standard equipment furnished with each machine. If work of greater scope is desired, convenient attachments are provided. See list of attachments applicable to the different types of machines illustrated and described on following pages.

The Miller Universal Saw-Trimmer is the recognized "Standard" of upward of 8,000 shops—designed for general composing room and printing house use.

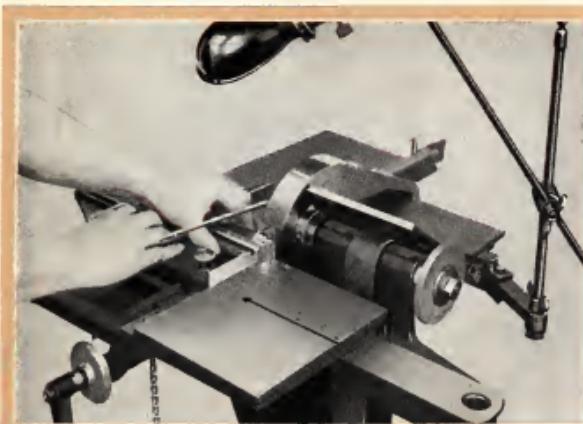
The Miller Heavy-Duty Saw-Trimmer more than doubles the size capacity of the Universal, is more massive in its construction with proportionately larger motor. Equally well adapted to the handling of small work, its increased size encompasses every possible requirement of the largest newspaper and commercial composing room, paper box factory, electrotype or engraving plant and other allied industries.

The Miller Special-Purpose Saw-Trimmer is designed particularly for the large newspaper where more than one Miller is required for slug-cutting during the "rush hours," and for the linotype trade composition plant.

The Miller Printer's Bench Saw-Trimmer is designed to meet the requirements of the smaller office. There is also a demand for this machine from the larger offices where it is profitably employed as an auxiliary to the Miller Universal, Heavy-Duty or Special-Purpose Saw-Trimmers in handling overflow work during "rush" periods.

We direct your attention to the illustrations of practical operations on the following pages. They tell a graphic story that words cannot describe.

MILLER SAW-TRIMMERS AND SPECIAL ATTACHMENTS

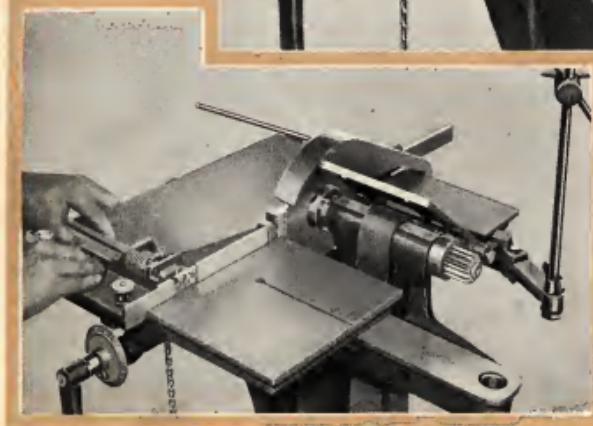
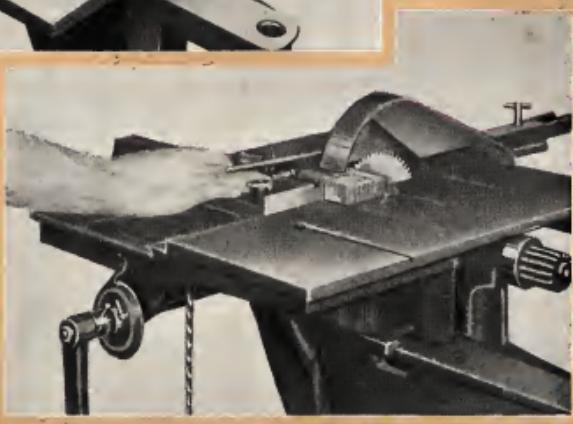


Sawing and trimming linotype slugs in one operation. The Point End Gauge insures accurate adjustment, while the Work-holding Vise grips the slugs securely. Note the Metal Guard which protects the operator.

Performed on all types  
Miller Saw-Trimmers.

Sawing linotype slugs  
to save both ends.

Performed on all types  
Miller Saw-Trimmers.



Reducing the thickness  
of a slug which is held  
in position by 5-Point  
Line Holder quickly at-  
tached to Point End  
Gauge.

The 5-Point Line Holder  
is Standard Equipment  
with Universal, Heavy-  
Duty and Special-Purpose  
Machines. May be or-  
dered as Special At-  
tachment for Bench Saw-  
Trimmer.



This view shows Standard Equipped Machine with exceptions of the "Any-angle" Lighting Fixture which is a Special Attachment.

## MILLER HEAVY-DUTY SAW-TRIMMER

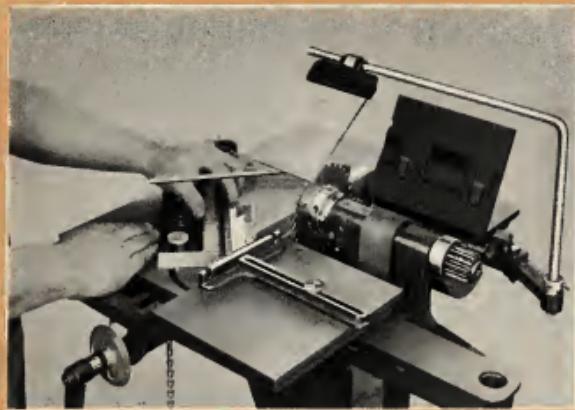
<i>Code</i>	<i>Akkfe</i>	<i>Akkgw</i>	<i>Akkbx</i>	Miller Heavy-Duty Saw-Trimmer including parts shown on page 11 and any motor listed on page 43, price	Miller Heavy-Duty Saw-Trimmer without motor, price	Miller Heavy-Duty Saw-Trimmer with countershaft, price
				\$575.00	\$325.00	\$500.00

### SPECIFICATIONS

Speed of saw arbor, 3600 r. p. m., diameter of pulley, 2".  
 Dimensions of sliding table, 9"x28½"; tables over all, 28½"x28½".  
 Sawing capacity, 36°. End gauge (width) capacity, 134 picas. End gauge with extension attachment, 234 picas. Work-holding vise capacity, 15".

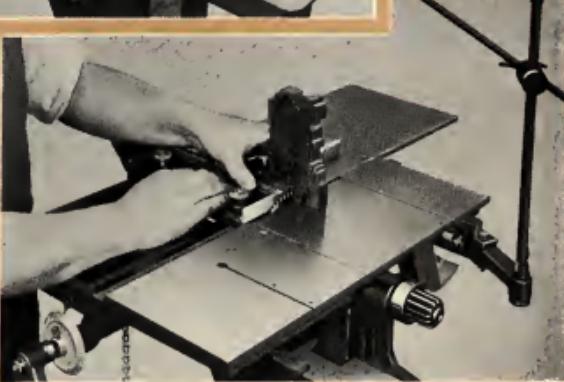
Prices are F. O. B. Pittsburgh and are subject to Change Without Notice.  
 Supersede Prices in all Previous Editions.

MILLER SAW-TRIMMERS AND SPECIAL ATTACHMENTS



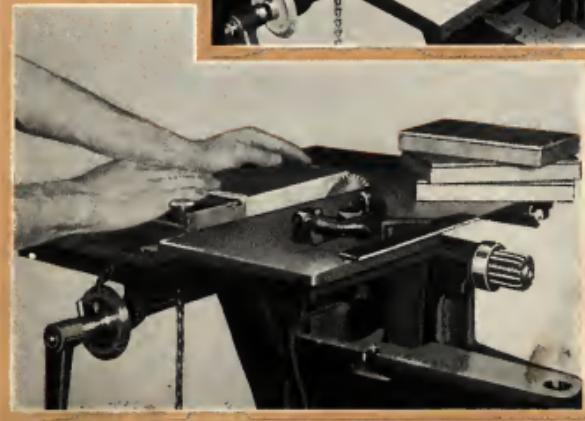
For left-hand miters (and for right-hand miters with face rule down) the Standard Miter Vice here shown is used in connection with the Removable Work-holding Vice to hold the material securely.

*The Standard Miter Vice is Standard Equipment with all types of Miller Saw-Trimmers.*



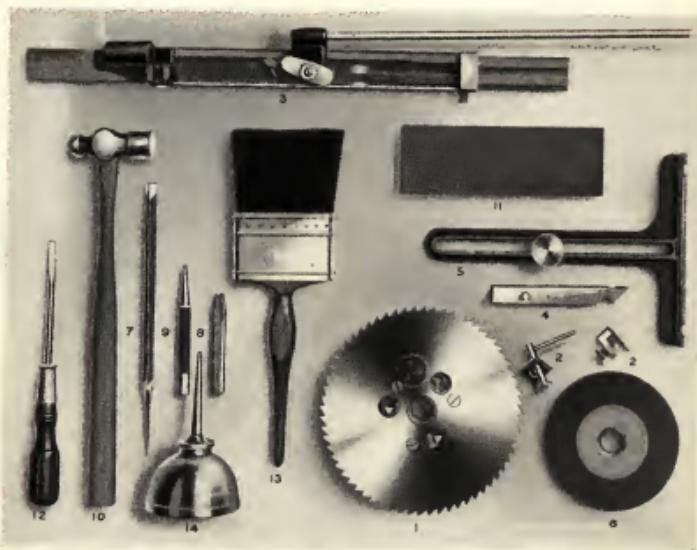
Outside mortising with Standard Saw. By adjusting the height of table, outside mortises may be cut in mounted cuts from 1 point to 9 picas in depth.

*This is possible only on the Universal and Heavy-Duty. Other types are not equipped with table elevating mechanism.*



Trimming wood base plate smaller than plate to bring it down to width of newspaper columns, allowing plate to overhang. Resorted to at times where cuts are furnished a point or two wider than column widths.

*This is possible only on the Universal and Heavy-Duty. Other types are not equipped with table elevating mechanism.*



## STANDARD UNIVERSAL AND HEAVY-DUTY EQUIPMENT

1—Two 6-inch Standard Saws and Heads with Trimmers	5—Hammer with Locking Screw	10—Hammer
2—Line Holder, 5-point	6—Flat Abrasive Wheel (1 1/4 inch)	11—Oil Stone
3—"Holdem" Removable Work-holding Vise	7—Standard Saw File	12—Screw Driver
4—Miter Vise	8—Standard Saw Swage	13—Brush
	9—Punch	14—Machine Oil Can

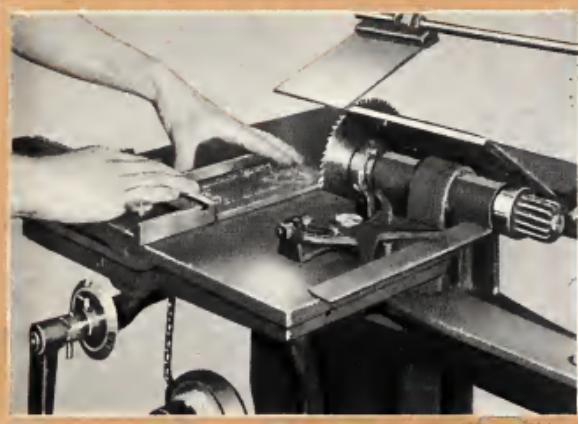
The Standard Equipment furnished with the Miller Universal and Heavy-Duty Saw-Trimmers consists of the items illustrated and listed above and the following: 1 column complete with tables, elevating mechanism, saw arbor and single pulley idler; 1 swivel gauge with locking bolt, nut and locating pin; 1 point end gauge with 40-pic finger (Heavy-Duty, 1 extra point end gauge with 60-pic finger); 1 saw hood with bolt and nut; 1 front and 1 rear metal chip box; as shown on pages 6 and 9.

The Standard Equipment shown on pages 6, 9 and 11 form complete machines, comprehending a wide variety of work, such as plain sawing, sawing and trimming in one operation, mitering any angle, outside mortising or "notching," undercutting, grinding, etc.

The sliding table is equipped with a pica swivel gauge, and a micrometer point end gauge, by which dimensions up to 60 picas may be secured on the Universal, 134 picas on the Heavy-Duty, in picas, points and fractions of a point. These gauges are quick-acting and are guaranteed absolutely accurate with the American Point System.

The main tables of the Universal and Heavy-Duty Saw-Trimmers are equipped with an elevating mechanism whereby the tables are raised and lowered in relation to the saw head. This elevating mechanism is controlled by a micrometer point dial marked by points and half points up to two picas for one revolution. By the operation of these gauges any vertical or lateral cutting required may be made with absolute accuracy to American Point System. When tables are elevated, the hinged table automatically folds into place, forming a plain saw table.

The work-holding vise, miter vise, and five-point line holder, for holding material while either sawing or trimming, are quick-acting and positive.

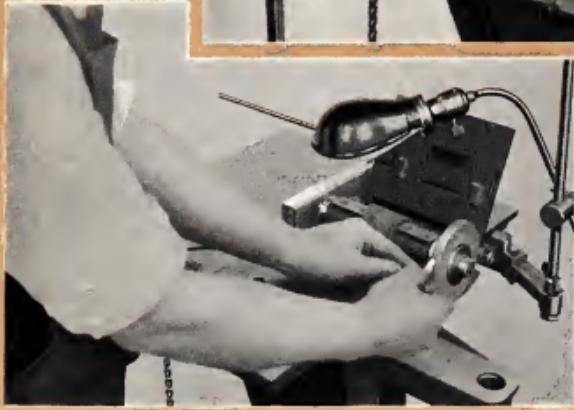
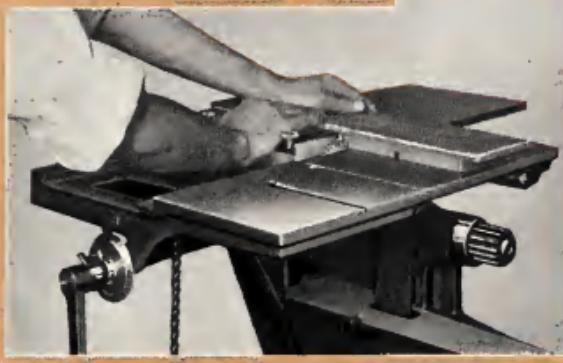


Squaring and trimming an unmounted plate preparatory to mounting on wood block or beveling for patent base.

Performed on all types  
*Miller Saw-Trimmers.*

Under-cutting large mounted plate with Standard Saw to take out warp so plate will lock-up flat on bed of press. Sometimes done for economy instead of reblocking. The same principle may be applied to various purposes.

*This operation is possible only on the Universal and Heavy-Duty as the other types are not supplied with table elevating mechanism.*



Grinding with Standard Flat Aluminum Wheel. All tools in the office may be kept keen-edged with the Miller.

*The Flat Aluminum Wheel is Standard Equipment with all types of Miller Saw-Trimmers.*

## SPECIAL ATTACHMENTS FOR MILLER SAW-TRIMMERS



T the suggestion of leading American printers, Special Attachments or Succeeding Units have been designed for instant application to the Standard Equipment regularly furnished with Miller Saw-Trimmers. Each of these attachments performs a specific function not comprehended by the original equipment, and materially increases the scope and capacity of the machine. No tools other than the operator's hands are required to apply or remove any attachment. Special attachments are extra and may be ordered with the Standard Equipment or at any subsequent time.

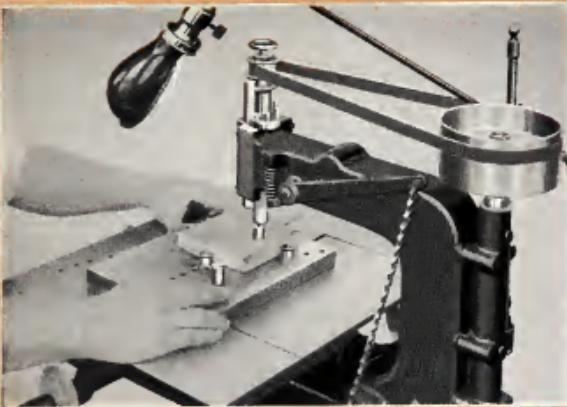
The tools furnished with the Standard Equipment limit the use of the machine to wood, linotype slugs, electrotypes, stereotypes and the softer metals. With the aid of the Special Attachments applied to the Standard Equipment, the Miller Universal and Heavy-Duty Saw-Trimmers may be instantly converted into machines to perform any of the following operations: Sawing, trimming, mitering, grinding, undercutting, mortising, notching, beveling, rabbeting, routing, drilling, jig-sawing, broaching and planing type-high.

This listing of the common operations gives but a limited idea of the wonderful versatility of the Miller as provided by the different Special Attachments. Every day as the operator learns its possibilities, the machine presents new uses, with recurrent regularity. He is oftentimes enabled by some ingenious Miller operation to quickly remedy a printing defect which would otherwise seriously handicap production or mar the perfection of the printed product.

On the following pages are pictured several of the operations in which the Special Attachments are employed. The Attachments are illustrated and described on the page directly opposite the operating views. These illustrations will give you a more comprehensive idea of the value of the Special Attachments than we can possibly convey to you in words.

The Special Attachments usually ordered are the Brass Saw for cutting brass rule, brass embossing plates, zinc and copper; the Rabbeting Head for rabbeting plates for tacks; the Beveling Head for beveling plates for patent blocks; the Router and Jig-Saw for routing, drilling, jig-sawing, broaching, planing type-high and countless operations of a similar nature. Other attachments may be ordered from time to time as the need for them arises.

All Special Attachments are applicable to the Miller Universal and Heavy-Duty Saw-Trimmers. Those applicable to our other two types of machines, the Miller Special-Purpose and Miller Printer's Bench Saw-Trimmers, are listed in other parts of this book descriptive of these types.

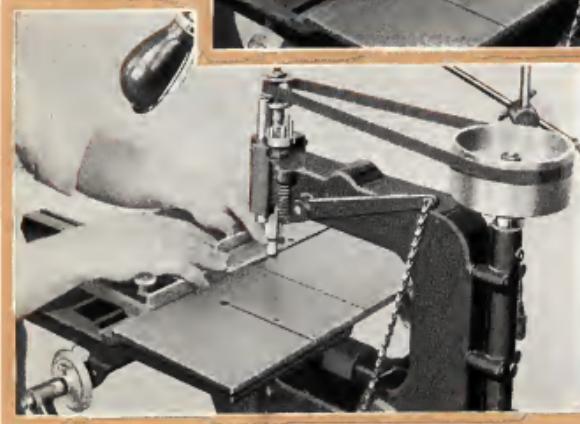


**Routing circle.** The Miller is the only machine that will rout perfect circles. The block revolves on a pin inserted in the work plate, the plate being held firmly against the gauges.

*Router and Jig-Saw Attachment applicable only to Miller Universal and Heavy-Duty Saw-Trimmers.*

Planing wood base cut to type-high. Ordinary size cuts can be planed at the rate of five per minute. To avoid the errors induced by the Daniels Planer, we use a large router bit for planing type-high.

*Router and Jig-Saw Attachment applicable only to Miller Universal and Heavy-Duty Saw-Trimmers.*



Undercutting unmounted plate for mounting on patent base where narrow margins between plates provide insufficient space for manipulation of register hooks.

*Router and Jig-Saw Attachment applicable only to Miller Universal and Heavy-Duty Saw-Trimmers.*



Router and Jig-Saw Attachment  
in working position.

### ROUTER, AND JIG-SAW ATTACHMENT FOR MILLER UNIVERSAL AND HEAVY-DUTY SAW-TRIMMERS

For routing, drilling, jig-sawing, broaching and type-high planing. The working tools used with this attachment are illustrated on page 17. See pages 14, 16 and 17 for details.

<i>Code</i>			
<i>Akadvp</i>	Router and Jig-Saw Attachment with tools complete for Miller Universal . . . . .	\$275.00	
<i>Akby</i>	Router and Jig-Saw Attachment with tools complete for Heavy-Duty . . . . .	300.00	

Prices are F. O. B. Pittsburgh, and are subject to Change Without Notice.  
Supersede Prices in all Previous Editions.



Jig-Sawing a circular inside mortise. The block revolves on a pin inserted in the work plate insuring a perfect circle. This operation simplifies the making of circular shaped cutting rule dies, commonly used for die-cutting labels, etc.

*Router and Jig-Saw Attachment applicable only to Miller Universal and Heavy-Duty Saw-Trimmers.*



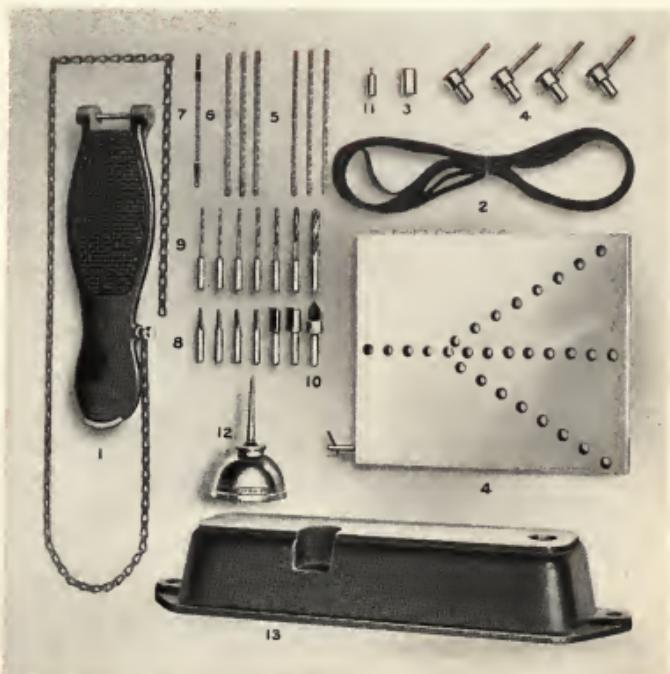
Jig-Sawing an inside mortise. A hole is first drilled to admit the jigsaw. By a simple change the jigsaw is then thrown into operation and the mortise is sawed out.

*Router and Jig-Saw Attachment applicable only to Miller Universal and Heavy-Duty Saw-Trimmers.*



- Substituting a broach for the saw, the walls of the mortise are smoothed up and squared in the corners. During this operation the block may be manipulated into position with the Point End Gauge insuring point system accuracy.

*Router and Jig-Saw Attachment applicable only to Miller Universal and Heavy-Duty Saw-Trimmers.*



## STANDARD EQUIPMENT ROUTER AND JIG-SAW ATTACHMENT

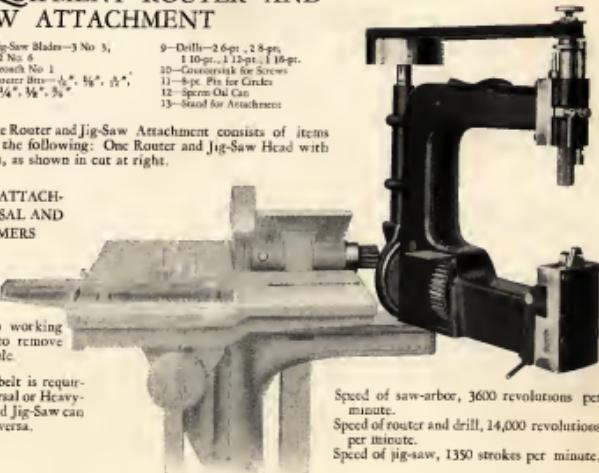
The equipment furnished with the Router and Jig-Saw Attachment consists of items illustrated and listed above and the following: One Router and Jig-Saw Head with locking bolt, and driving pinion, as shown in cut at right.

### ROUTER AND JIG-SAW ATTACHMENT FOR MILLER UNIVERSAL AND HEAVY-DUTY SAW-TRIMMERS

Shown swung out of working position. For operative position see page 15.

To swing this attachment into working position, it is only necessary to remove circular saw, and elevate the table.

No change of speed or shift of belt is required. Complete change from Universal or Heavy-Duty Saw-Trimmer to Router and Jig-Saw can be made in 30 seconds, and vice versa.



Speed of saw-arbor, 3600 revolutions per minute.

Speed of router and drill, 14,000 revolutions per minute.

Speed of jig-saw, 1350 strokes per minute.

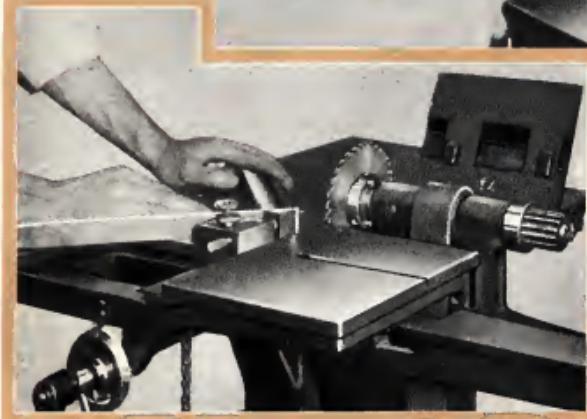
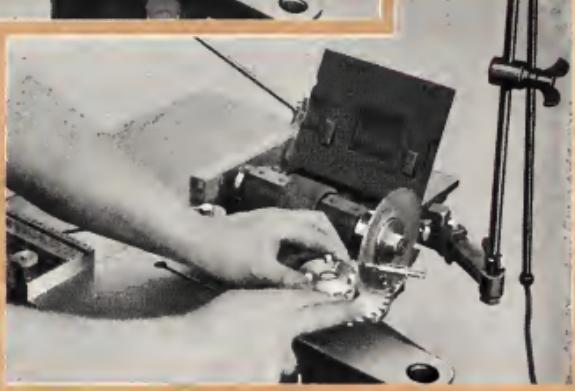


Sawing copper plate with  
6-Point 5-inch Brass Saw.  
With this saw the harder  
metals may be cut with  
great rapidity.

*6-Point, 5-inch Brass Saw  
is applicable to all types  
of Miller Saw-Trimmers.*

**Brass Saw Grinding Attachment and Dish Emery Wheel** in operation. This device spaces the teeth uniformly. An inexperienced operator can keep saw in perfect condition.

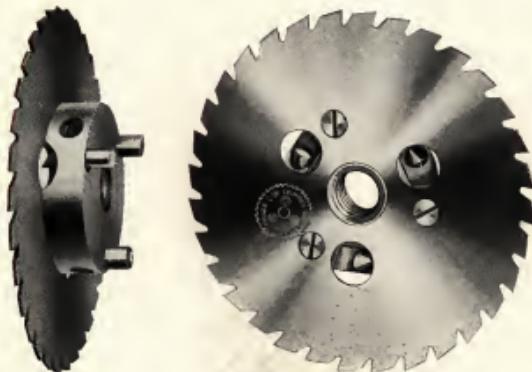
*Brass Saw Grinding Attachment is applicable to all types of Miller Saw-Trimmers.*



Right hand mitring of  
rule, face up, with Right  
Hand Miter Vise. This  
attachment is quickly  
applied with no other  
tools than the hands.

*Right Hand Miter Vise is  
applicable to all types of  
Miller Saw-Trimmers.*

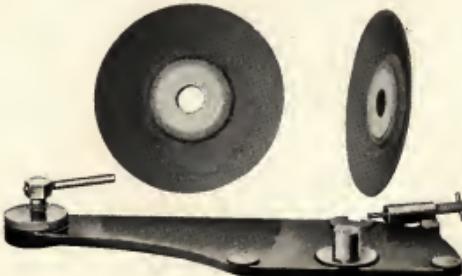
## 6-POINT AND 4-POINT 5-INCH BRASS SAWS



For cutting brass rule, brass embossing dies, zinc and copper plates.

Code.			
<i>Abaq</i>	6-Point 5-inch Brass Saw and Head with Trimmer Knives, complete.		\$14.00
<i>Abafr</i>	6-Point 5-inch Brass Saw Blade with Screws.		.50
<i>Abagz</i>	6-Point 5-inch Brass Saw Head with Trimmer Knives		5.50
<i>Abagt</i>	4-Point 5-inch Brass Saw and Head with Trimmer Knives, complete.		13.00
<i>Abagu</i>	4-Point 5-inch Brass Saw Blade with Screws.		7.50
<i>Abagv</i>	4-Point 5-inch Brass Saw Head with Trimmer Knives.		.50
<i>Abaht</i>	Extra Trimmer Knives (for either 6-Point or 4-Point Saws), each		.50
<i>Abasu</i>	Extra Trimmer Knife Plugs (for either 6-Point or 4-Point Saws), per set of three		.75
<i>Abagj</i>	Extra Trimmer Knife Set Screws (for either 6-Point or 4-Point Saws), per set of three		.25
<i>Abaku</i>	Extra Screws for either Saw Blade, per set of three		.25

## BRASS SAW GRINDING ATTACHMENT

NOTE—Initial order for any brass saw must include  
head, blade with saw and grinding attachment.

For sharpening brass saws only, and spacing the teeth uniformly.

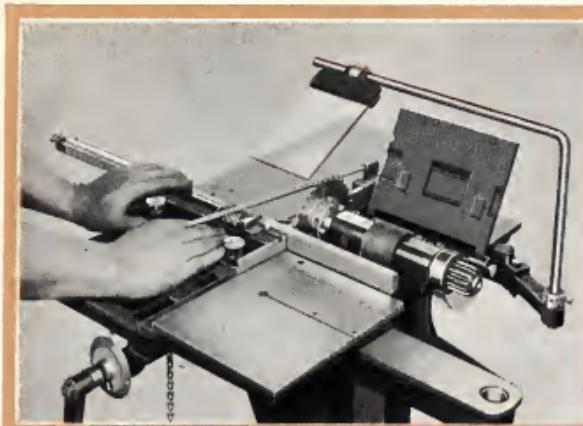
Code:	Brass Saw Grinding Attachment complete with Dish Aluminum Wheel.	\$ 9.50
<i>Abamy</i>	Dish Aluminum Wheel, 5-inch Diameter.	2.00

## RIGHT HAND MITER VISE

Used in conjunction with swivel gauge when mitering rule face up.

Code:	Right Hand Miter Vise, complete.	\$10.00
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Prices are F. O. B. Pittsburgh, and are subject to Change Without Notice.  
Supersede Prices in all Previous Editions.



Sawing and trimming full length brass rule with Extension Point End Gauge—a valuable adjunct in handling work of this nature.

*Extension Point End Gauge is applicable to all types of Miller Saw-Trimmers.*

The Register Gauge is indispensable for adjusting a cut or plate to obtain a straight edge. With one edge of the block parallel with face of plate the other three sides are easily squared.

*Register Gauge as applicable to all types of Miller Saw-Trimmers.*



The 12-Point Attachment used in conjunction with the Work-holding Vise is indispensable when narrow widths are to be cut or trimmed.

*12-Point Attachment for Work-holding Vise is applicable to all types of Miller Saw-Trimmers.*



### EXTENSION POINT END GAUGE

Used in place of regular Point End Gauge to gauge by picas, points and half points from 60 to 160 picas on 60-Pica Swivel Gauge, and from 134 to 234 picas on 134-Pica Swivel Gauge.

Code: Abb'dj Extension Point End Gauge, complete . . . . . \$18.00



### REGISTER GAUGE

For registering the printing surface of cuts when sawing and trimming.

Code: Abb'dj Register Gauge, complete . . . . . \$8.00



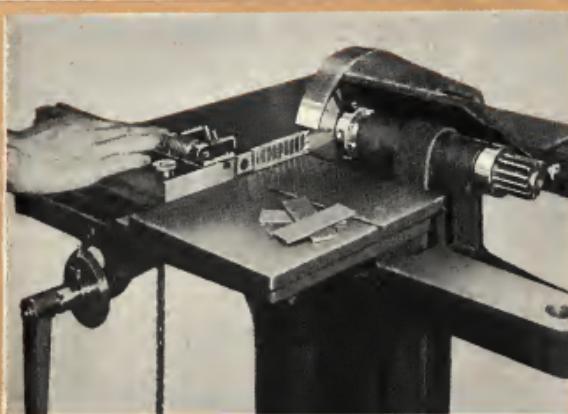
### 12-POINT ATTACHMENT FOR WORK-HOLDING VISE

Used in conjunction with the Removable Work-holding Vise and Gauges for determining measures between 12 and 24 points.

Code: Abb'ek 12-Point Vise Attachment . . . . . \$5.00

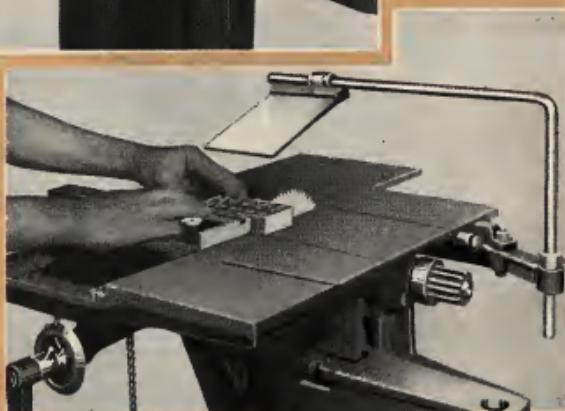
Prices are F. O. B. Pittsburgh, and are subject to Change Without Notice.  
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MILLER SAW-TRIMMERS AND SPECIAL ATTACHMENTS



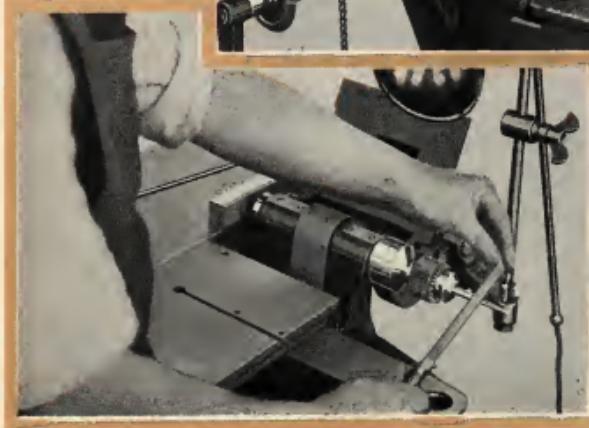
Reducing the thickness of a linotype slug being held in position by Line Holder which is attached to Point End Gauge.

*Line Holders are applicable to all types of Miller Saw-Trimmers.*



Glass Guard through which the operator may have a good view of his work and afford protection from flying chips.

*Glass Guard is applicable only to the Miller Universal and Heavy-Duty Saw-Trimmers.*



Geared Drill Chuck as used for turning purposes. This attachment may also be employed for ordinary drilling.

*Geared Drill Chuck is applicable to all types of Miller Saw-Trimmers.*

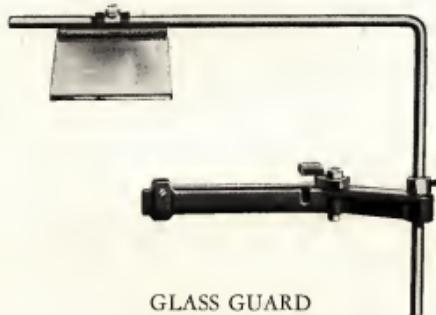


## LINE HOLDERS

To clamp work to Point End Gauge, especially to reduce linotype slugs from leaded master to solid.  
A set consists of a movable jaw with set screws, eccentric pin, lever and jaw.

Code:

<i>Abby</i>	3-Point Line Holders (holds work ranging from 6-points to 10-points in thickness), per set complete.....	\$ 6.00
<i>Abbyw</i>	10-Point Line Holders (holds work ranging from 12-points to 18-points in thickness), per set complete.....	6.00
<i>Abbyx</i>	18-Point Line Holders (holds work ranging from 20-points to 36-points in thickness), per set complete.....	6.00

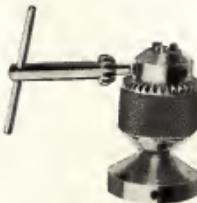


## GLASS GUARD

Used in place of Saw Hood when sawing large plates.

Code:

<i>Abbg</i>	Glass Guard complete (as illustrated) for Universal, Special-Purpose and Printers Bench, price.....	\$ 7.50
<i>Abbgc</i>	Glass Guard complete (as illustrated) for Heavy-Duty, price.....	7.50
<i>Abbgx</i>	Glass Guard complete (for attaching to "Anyang!" Lighting Fixture) for Universal, Special-Purpose and Printers Bench, price.....	7.50
<i>Abbk</i>	Glass Guard complete (for attaching to "Anyang!" Lighting Fixture) for Heavy-Duty, price.....	7.50
<i>Abby</i>	Combination Glass Guard and "Anyang!" Lighting Fixture, complete for Universal, Special-Purpose and Printers Bench, price.....	13.60
<i>Abbl</i>	Combination Glass Guard and "Anyang!" Lighting Fixture, complete, for Heavy-Duty, price.....	13.60



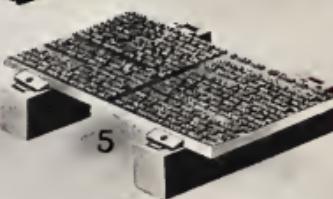
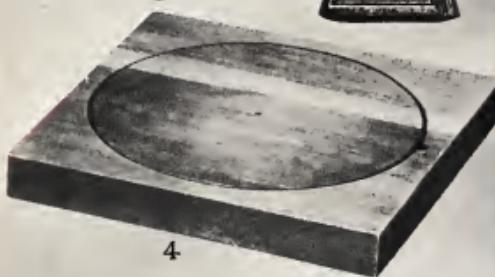
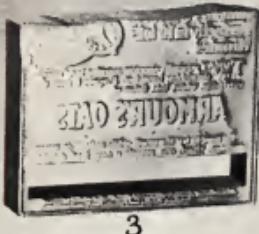
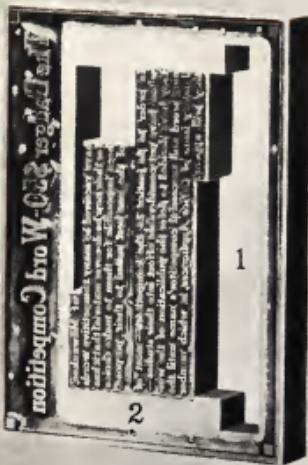
## GEARED DRILL CHUCK

Capacity, 0 to  $\frac{3}{8}$ -inch.

Code:

<i>Abbr</i>	Geared Drill Chuck, fitted to saw arbor, price.....	\$11.00
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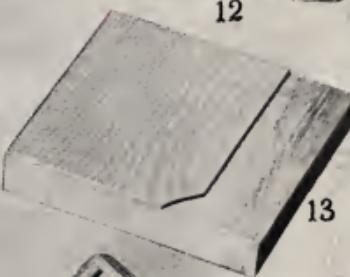
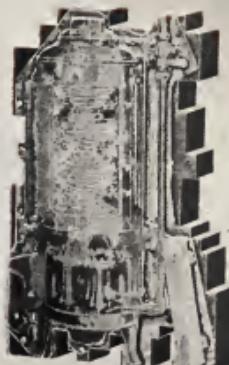
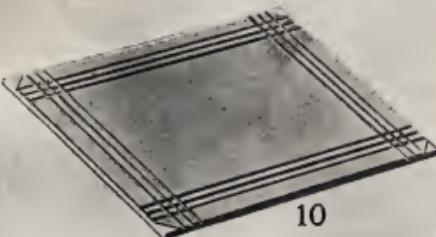
### ILLUSTRATING A FEW EXAMPLES

- (1) Inside mortising (rounded edges)—using Drill, Jig-Saw and Brush.
- (2) Routing of surplus metal (electrics, stereo or originals)—using Metal Router Bit.
- (3) Mortising solid stereo plates—using Drill, Jig-Saw and Brush.
- (4) Circle (in wood or metal) for steel-rule cutting-die, or circular border—using Drill, Jig-Saw and Print Pin.
- (5) Bevel plates for patent base—using Beveling Head.
- (6) Inside mortise, with under-cut (key-spaces) to provide an outside lock-up, thus eliminating the usual "plugging"—using Jig-Saw, Standard Saw and Brush.
- (7) Interlocking rules (over-cut, under-cut, and mitered)—using Standard Saw and Mitering Device.
- (8) Under-cut, to allow plate to project over a cross-bar—using Standard Saw.



### ILLUSTRATING A FEW EVERY-DAY OPERATIONS

- (1) Inside mortise (diamond electro)—using *Drill, Jig-Saw and Brush.*
- (2) Rounding off copper metal (electro, anodes or originals)—using *Metal Rester Bit.*
- (3) Mortising solid stereo plates—using *Drill, Jig-Saw and Brush.*
- (4) Concave (in wood or metal) for single-hole corrugated, or concave border—using *Drill, Jig-Saw and Plane Pic.*
- (5) Bevel plates for piano base—using *Beveling Head.*
- (6) Inside mortise, with under-cut (key-spaces) to provide an outside lock-up, thus eliminating the usual "plugging"—using *Jig-Saw, Standard Line and Brush.*
- (7) Interlocking rules (convex, under-cut, and nested)—using *Standard Line and Mitering Device.*
- (8) Under-cut, to allow plate to project over a cross-bar—using *Standard Line.*
- (9) Under-cut level for piano base (to secure narrow margins)—using *Special Under-cut Bit.*
- (10) Panel thin block (zinc or copper) with border lines and a rubbed tacking shoulder—using an *Angle Cutter and the Brass Saw.*
- (11) Inside mortise (thin shell brass)—using *Metal Rester and Brush.*
- (12) Convex mortise (plain on wood mount)—using *Standard Saw.*
- (13) Rounding wood or metal mounts to type-high—using *Router.*
- (14) Circle (in copper or zinc), cut absolutely true, rubbed tacking shoulder, and a white leader line cut around the circle—using *Drill, Router and Post Pin.*
- (15) Various monotype and letterpress rules and borders—all the slugs in each combination were given each number by one operation—using *Standard Line, Drummer and the Mitering Device.*

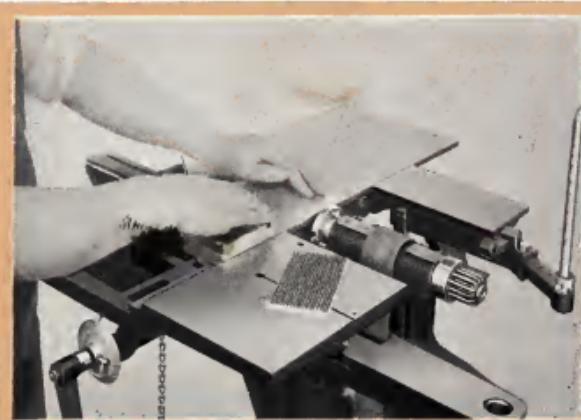


14

## EVERY-DAY OPERATIONS

- (9) Under-cut bavel for panel base (to secure narrow margins)—using Special Undercut Av.
- (10) Panel tint block (iron or copper) with border lines and a rebated racking shoulder—using an Angle Gouge and the Draw Saw.
- (11) Inside miter (thin shell stereo)—using Metal Router and Bevel.
- (12) Outside miter (plate on wood mount)—using Standard Saw.
- (13) Routing wood or metal mounts to type-high—using Router.
- (14) Circle (in copper or zinc), cut absolutely true, rebated racking shoulder, and a white border line cut around the circle—using Draft, Router and Paint Pen.
- (15) Various mortise and tenon ratios and bedeck—all the shapes in each combination were made in each instance by one operation—using Rabbeted Line, Trimmers and the Mortising Device.

MILLER SAW-TRIMMERS AND SPECIAL ATTACHMENTS

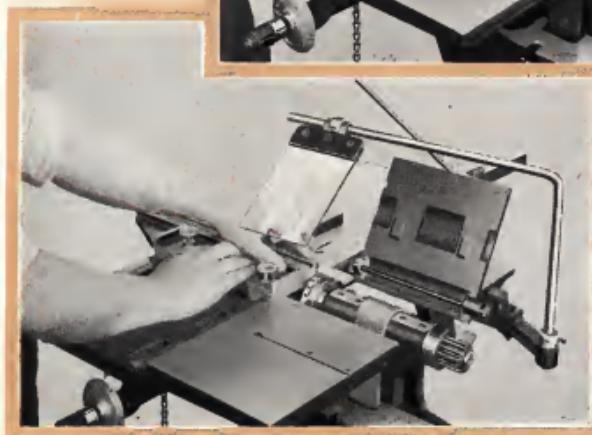
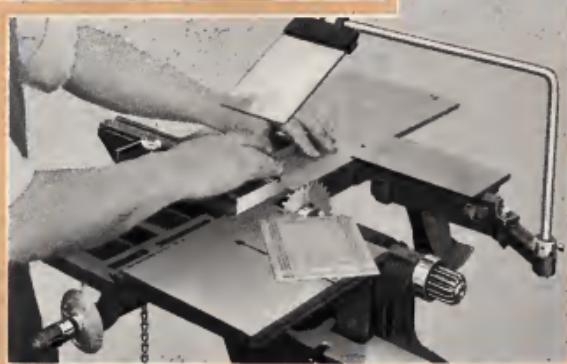


Beveling Head for beveling plates for patent base. Rabbeting Head for Rabbeting tint blocks and plates for tacking, or undercutting plates for narrow margin hooks, is applied in same manner as Beveling Head.

Rabbeting and Beveling Heads are applicable only to the Miller Universal and Heavy-Duty Saw-Trimmers.

Cutting border lines on a copper faced tint block with 5-inch Special Brass Saw. Brass rule may be notched in the same manner.

5-inch Special Brass Saws are applicable to all types Miller Saw-Trimmers. The operation shown, however, is possible only on the Miller Universal and Heavy-Duty, as the other types are not equipped with table elevating mechanism.



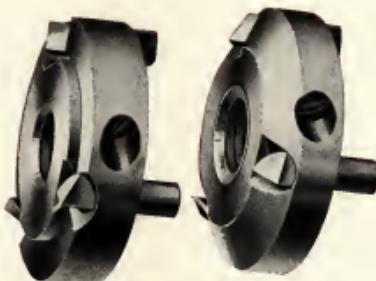
Notching rule to be folded with 45° Angle Cutter. Rule corners treated in this manner will match perfectly.

This operation is possible only on Miller Universal and Heavy-Duty Saw-Trimmers, as other types are not equipped with table elevating mechanism.



RABBETING HEAD

For rabbeting tint blocks and plates for tacking and undercutting plates for narrow margin hooks.



BEVELING HEAD

For beveling plates for tacking and beveling patent base plates.

RABBETING AND BEVELING HEADS

Code:		Code:	
<i>Abby</i>	Rabbeting Head, complete .....	<i>Abkab</i>	Beveling Head, complete .....
<i>Abbzb</i>	Extra Knives for Rabbeting Head, each .....	<i>Abcb</i>	Extra 20° Knives for Beveling Head, each .....

<i>Abcf</i>	Extra 30° Knives for Beveling Head, each .....	\$7.00
<i>Abcf</i>	Extra 20° Knives for Beveling Head, each .....	.50
<i>Abcf</i>	Extra 30° Knives for Beveling Head, each .....	.50

5-INCH SPECIAL BRASS SAWS

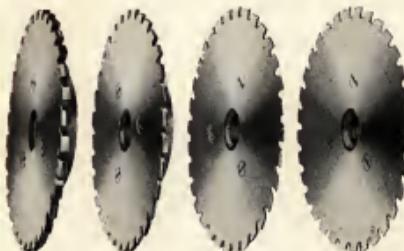
For notching brass rule. Trimmer knives cannot be used with these saws.

NOTE: Initial order for any brass saw must include head listed with saw and grinding attachment shown on page 19.

6-Point, 3-Point and 2-Point 5-inch special brass saw heads and blades interchange.

12-Point 5-inch special brass saw blade requires 12-Point special brass saw head.

6-Point 5-inch brass saw head and blade will not interchange with any of the special brass saw heads or blades.



With Head Complete

Code:		Code:	
<i>Aleak</i>	\$14.00	<i>Abkpa</i>	\$4.00
<i>Absl</i>	12.00	<i>Abqpa</i>	4.00
<i>Alefg</i>	11.00	<i>Abkr</i>	4.00
<i>Abvz</i>	10.00	<i>Abkz</i>	4.00

Code: *Abdk* Extra Screws for either saw blade, per set of three .....

Head Only

Code:		Code:	
<i>Abku</i>	.....	<i>Abku</i>	\$10.00
<i>Abdu</i>	.....	<i>Abdu</i>	8.00
<i>Ably</i>	.....	<i>Ably</i>	7.00
<i>Abdk</i>	.....	<i>Abdk</i>	6.00

\$.25



ANGLE CUTTERS

For cutting angles and notching rule to be folded. Furnished in 45°, 60°, 90° and 120° including angle. Will notch rule from 1 to 12 points, inclusive.

Code:		Code:	
<i>Abdfg</i>	120° Angle Cutter with head, complete .....	<i>Abdew</i>	60° Angle Cutter with head, complete .....
<i>Abdkf</i>	90° Angle Cutter with head, complete .....	<i>Abdpk</i>	45° Angle Cutter with head, complete .....

NOTE: Initial order for angle cutters must include head listed with cutter and grinding attachment, and angle cutter vise shown on page 29. Angle cutter heads do not interchange.

Prices are F. O. B. Pittsburgh, and are subject to Change Without Notice.

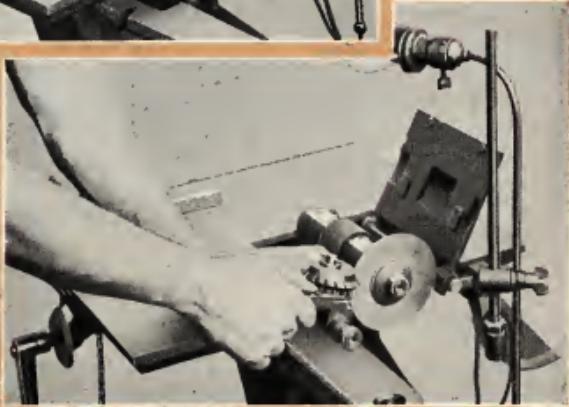
Supersede Prices in all Previous Editions.

MILLER SAW-TRIMMERS AND SPECIAL ATTACHMENTS



Clamping rule to sliding table for notching with Angle Cutter Vise, used in conjunction with Swivel Gauge.

*This Attachment is applicable only to Miller Universal and Heavy-Duty, as other types are not equipped with table elevating mechanism.*



Angle Cutter Grinding Attachment and Dish Emery Wheel in operation. This device spaces the teeth uniformly enabling the operator to keep his Angle Cutters in perfect condition.

*The Angle Cutter Grinding Attachment is applicable only to the Miller Universal and Heavy-Duty Saw-Trimmers.*



Cleaning spacebands with 6-inch Surfacing Discs covered with Aloxite Cloth.

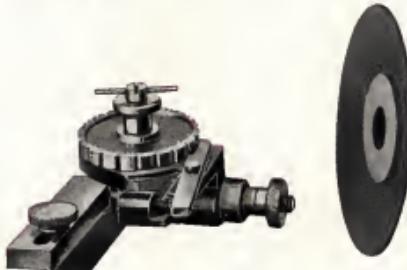
*6-inch Surfacing Discs are applicable to all types of Miller Saw-Trimmers.*



### ANGLE CUTTER VISE

Used in conjunction with Swivel Gauge to clamp rule to sliding table for notching.

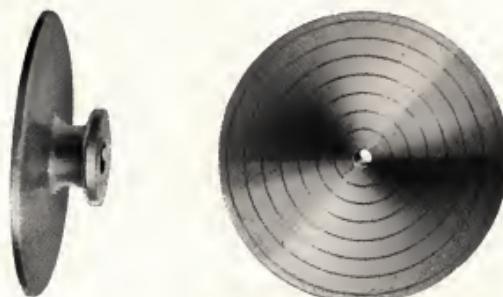
Code: *Abdg* Angle Cutter Vise, complete . . . . . \$10.00



### ANGLE CUTTER GRINDING ATTACHMENT

For sharpening angle cutters only, and spacing the teeth uniformly.

Code:				
<i>Abdr</i>	Angle Cutter Grinding Attachment, complete with Dish Alundum Wheel	.....	\$35.00	
<i>Abdw</i>	Dish Alundum Wheel, 5-inch diameter	.....	2.00	



### 6-INCH SURFACING DISCS

For grinding and polishing flat surfaces with Aloxite Cloth.

Code:				
<i>Abds</i>	6-inch Surfacing Discs, price per pair	.....	\$12.00	
<i>Abasj</i>	No. 0 (Fine) Aloxite Cloth (Die Cut) for 6-inch Surfacing Discs, per dozen	.....	3.00	
<i>Abek</i>	No. 1 (Medium) Aloxite Cloth (Die Cut) for 6-inch Surfacing Discs, per dozen	.....	3.00	
<i>Abel</i>	No. 2 (Coarse) Aloxite Cloth (Die Cut) for 6-inch Surfacing Discs, per dozen (The three numbers listed above may be ordered in dozen lots assorted if desired.)	.....	3.00	
<i>Abdg</i>	Crocus Cloth (Very Fine) (Die Cut) for 6-inch Surfacing Discs, per dozen	.....	3.00	

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Trimming long, narrow cut with the aid of Point End Gauge with 60-Pica Finger.

*Point End Gauge with 60-Pica Finger is applicable to all types of Miller Saw-Trimmers.*



Grinding Trimmer Knife to correct bevel with Trimmer Knife Grinding Attachment.

*The Trimmer Knife Grinding Attachment is applicable to all types of Miller Saw-Trimmers.*



Grinding linotype cutter evenly and to correct bevel with Linotype Cutter Grinding Attachment.

*This Attachment is applicable only to Miller Universal and Heavy-Duty, as other types are not equipped with table elevating mechanism.*

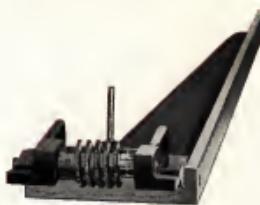
### POINT END GAUGES

Used in conjunction with Swivel Gauges to gauge by picas, points and half points from 0 to 60 picas on 60-pica Swivel Gauge and from 0 to 134 picas on 134-pica Swivel Gauge.

Also used in conjunction with barter to gauge miters.

Code:	
Absnb	Point End Gauge, with 40-pica Finger, complete.....
Abscb	Point End Gauge, with 60-pica Finger, complete.....

\$20.00  
28.00



### TRIMMER KNUIFE GRINDING ATTACHMENT

For Grinding Trimmer Knives to Correct Bevel.

Code:	
Akqfb	Trimmer Knife Grinding Attachment... \$3.50

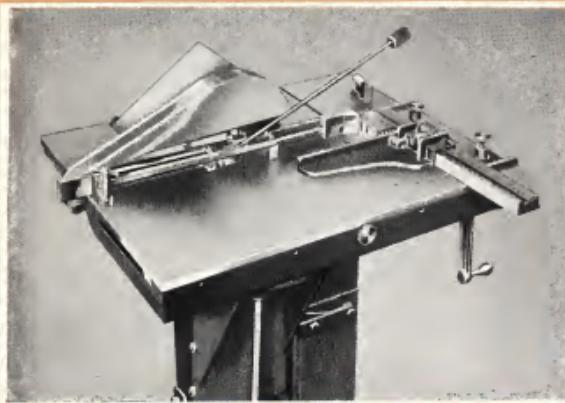
### MILLER LINOTYPE CUTTER GRINDING ATTACHMENT

This device, applicable to Miller Universal and Heavy-Duty Saw-Trimmers, provides a quick, accurate method of grinding Linotype Cutters. The cutter is clamped in holder, as illustrated, and with table lowered to proper contact with emery wheel, it is but the work of an instant to grind the cutter evenly and at just the proper angle. Saves time, insures perfect results and knives last longer.



Code:	
Ahbs	Linotype Cutter Grinding Attachment, price each... \$8.00

Prices are F. O. B. Pittsburgh, and are subject to Change Without Notice.  
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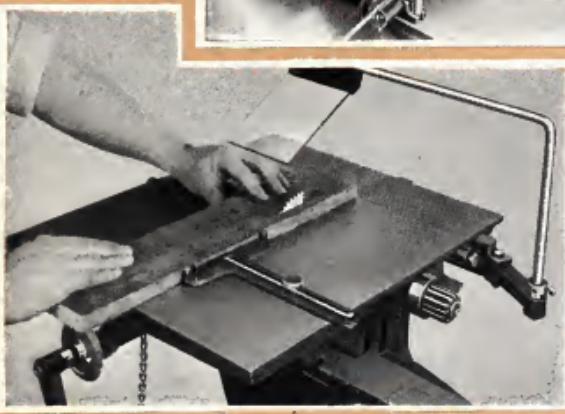


Trimming Ribbed Slugs  
with aid of Extension  
Foot Attachment to  
Miller Work-holding  
Vise.

*Extension Foot Attachments  
for Miller Work-holding  
Vise are applicable to all  
types of Miller Saw-Trim-  
mers.*

Mitering several lengths  
at one operation with aid  
of Point End Gauge and  
batter, held securely  
with the Standard Miter  
Vise.

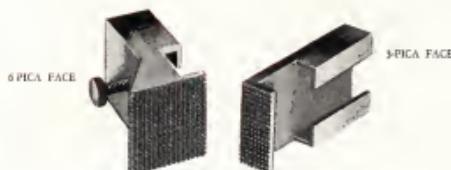
*Practical operation on all  
types of Miller Saw-Trim-  
mers.*



Rip-Sawing on Miller  
Universal Saw-Trimmer.  
Sliding Table is held  
stationary and the Batter  
is used as a gauge.

*This operation is practical  
only on the Universal and  
Heavy-Duty. Can be done  
on Special-Purpose and  
Bench Saw-Trimmers with  
the aid of the auxiliary bed  
supplied with these ma-  
chines.*

## EXTENSION FEET FOR MILLER WORK-HOLDING VISE



These Feet are designed to fit on the end of the Miller Saw-Trimmer Work-holding Vise, secured by means of a small thumb screw. Their use insures absolute secure and accurate locking of ribbed slugs and other materials of this nature. They are also an important factor of safety and accuracy in the cutting and trimming of short measure work.

Made in two sizes, 3 and 6-pica face, adapting them to a wide variety of uses. Sold separately or in pairs.

Code:			
<i>Abl6</i>	Extension Foot for Miller Work-holding Vise, 3-Pica Face, price each.		\$2.50
<i>Abl6</i>	Extension Foot for Miller Work-holding Vise, 6-Pica Face, price each.		2.50

## METAL CHIP BOXES

Convenient receptacles for keeping brass, zinc and copper chips separated from the softer metals. Staunch, durable and easily attached or removed from column.

Code:		
<i>Abl6</i>	Metal Chip Box, rear, for Universal and Special-Purpose, price each	.56.50
<i>Abl6mp</i>	Metal Chip Box, rear, for Heavy-Duty, price each	6.50
<i>Abl6f</i>	Metal Chip Box, front, for Universal, price each	6.50
<i>Abl6fr</i>	Metal Chip Box, front, for Heavy-Duty, price each	6.50



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## MILLER SPECIAL PURPOSE SAW-TRIMMER

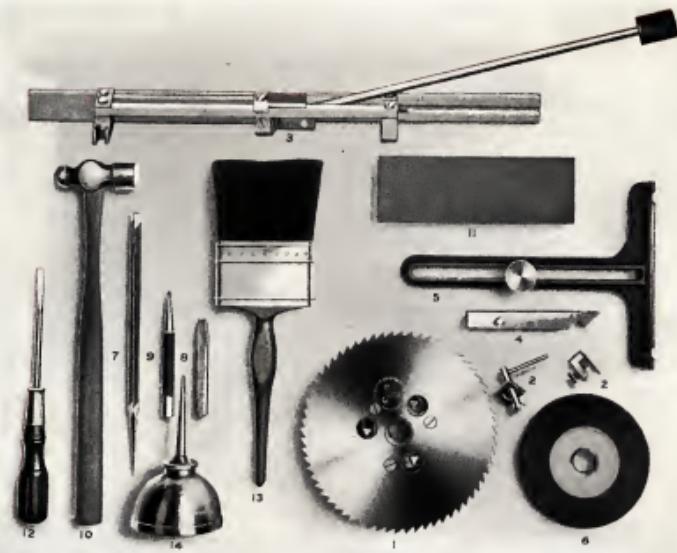
<i>Code.</i>	
<i>Above:</i>	Miller Special-Purpose Saw-Trimmer including parts shown on page 35, and any motor listed on page 45, price .....
<i>Above:</i>	Miller Special-Purpose Saw-Trimmer without motor, price .....
<i>Above:</i>	Miller Special-Purpose Saw-Trimmer with countershaft, price .....

### SPECIFICATIONS

Speed of saw arbor, 3600 f. p. m.; diameter of pulley, 2";  
dimensions of sliding table, 9"x20"; tables over all, 16"x20".

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Supersede Prices in all Previous Editions.



## STANDARD EQUIPMENT SPECIAL-PURPOSE SAW-TRIMMER

1—Two 5-inch Standard Saws and Heads with Tremmers	5—Barre with Locking Screw	10—Hammer
2-Line Holder, 5-pair	6—Flat Aluminum Wheel (4x $\frac{3}{8}$ -inch)	11—Oil Soap
3—"Holdtrix" Removable Work-holding Vise	7—Standard Saw File	12—Screw Driver
4—Miter Vise	8—Standard Saw Swage	13—Brush
	9—Punch	14—Machine Oil Can

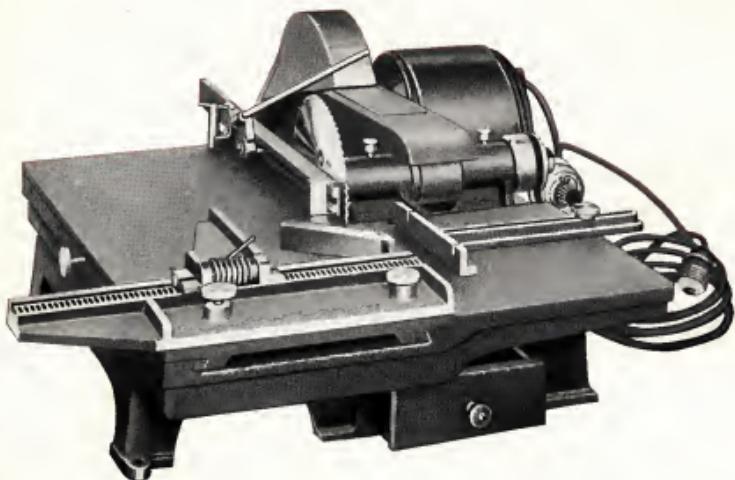
The equipment furnished with the Miller Special-Purpose Saw-Trimmer consists of the items illustrated and listed above, and the following: 1 Column complete with tables, saw arbor and single pulley idler; 1 60-pica swivel gauge with locking bolt, nut and locating pin; 1 point end gauge with 40-pica finger; 1 saw hood with bolt and nut; 1 rear metal chip box, shown on opposite page.

Unlike the Universal Machine, the Special-Purpose Saw-Trimmer main table is not equipped with elevating mechanism. The main table of the Special-Purpose is fixed rigidly to the column. This structure limits its capacity to four operations: Sawing, trimming, mitering any angle and grinding. Besides these four operations, drilling can be done with the addition of a geared drill chuck, and surfacing with the 6-inch surfacing discs. The standard equipment of this machine is identical with that of the Universal and Heavy-Duty, except that 5-inch saw blades are furnished instead of 6-inch blades and front chip box is omitted.

## SPECIAL ATTACHMENTS APPLICABLE TO SPECIAL-PURPOSE SAW-TRIMMER

"Anyangl" Lighting Fixture	shown on page 44
6-Point and 4-Point 5-inch Brass Saws and Grinding Attachment	shown on page 19
Right Hand Miter Vise	shown on page 19
Extension Point End Gauge	shown on page 21
Register Gauge	shown on page 21
12-Point Attachment	shown on page 21
Line Holders	shown on page 23
Glass Guard	shown on page 23
Geared Drill Chuck	shown on page 23
5-inch Special Brass Saw 2, 3 and 6-point	shown on page 27
6-inch Surfacing Discs	shown on page 29
Point End Gauge with 60-Pica Finger	shown on page 31
Trimmer Knife Grinding Attachment	shown on page 31
Extension Feet for Miller Work-holding Vise	shown on page 33

NOTE: No other attachment shown in this catalog can be applied to the Miller Special-Purpose Saw-Trimmer.



## MILLER PRINTER'S BENCH SAW-TRIMMER

### SPECIFICATIONS

Speed of saw arbor, 2100 r. p. m.; diameter of pulley, 2"; dimensions of sliding table 8 $\frac{5}{8}$ "x20"; tables over all 16" x 20".

<i>Code:</i>	Miller Printer's Bench Saw-Trimmer including parts listed on page 37 and $\frac{1}{6}$ H. P. motor—110 or 220 volt direct current or 110 or 220 volt, single phase, 60 cycle alternating current, price (cabinet stand extra) .....	\$250.00
<i>Above</i>	Miller Printer's Bench Saw-Trimmer including parts listed on page 37, without motor .....	230.00

## MILLER PRINTER'S BENCH SAW-TRIMMER CABINET

The Miller Printer's Bench Saw-Trimmer Cabinet is of solid, substantial construction, built by regular cabinet makers, of selected hardwood, nicely filled and varnished—an ornament to any shop. A metal chute carries all trimmings and waste materials to a box or other receptacle on the floor. Two liberal size drawers and additional compartments are provided for storage purpose. A hinged drop leaf gives additional table space.

Dimensions: 33 $\frac{1}{2}$ " high, 28" deep, 27" wide with hinged leaf lowered, 39" wide with leaf raised.

<i>Code:</i>	Miller Printer's Bench Saw-Trimmer Cabinet Stand .....	\$50.00
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Supersede Prices in all Previous Editions.

# MILLER PRINTER'S BENCH SAW-TRIMMER



**S**TANDARD equipment furnished with Miller Printer's Bench Saw-Trimmer includes: 1 Base complete with table and saw arbor; 2 6-inch standard saws with heads and trimmers; 1 "Holdtite" work-holding vise; 1 miter vise; 1 60-pica swivel gauge; 1 point end gauge with 40-pica finger; 1 batter; 1 saw hood; 1 emery wheel 4x $\frac{1}{2}$  inch; 1 auxiliary bed; 1 saw swage.

The Miller Printer's Bench Saw-Trimmer, in addition to filling every requirement of the small shop, also supplies the demand of the larger office for an auxiliary machine to the Miller Universal, Heavy-Duty and Special-Purpose Saw-Trimmers, where it is profitably utilized on overflow work during "rush" periods.

The Miller Printer's Bench Saw-Trimmer is a model of compactness and simplicity, calling for no special skill on the part of the operator when changing from one operation to another. Adjustments are few and easily understood—no tools or wrenches required—nothing but the hands. It is self-contained, complete with motor, ready to attach to any electric light socket—no extra electrical equipment or wiring required. Very light running, consequently consumes but little power. Sets on any substantial table or bench and is easily moved from place to place—always ready to run wherever it can be employed to the best advantage. This portable feature is of special value in the large office where it is often more convenient to transfer the machine to the work than to carry the work to and from the machine.

With the Standard Equipment furnished, the Miller Printer's Bench Saw-Trimmer will satisfactorily perform all ordinary operations of sawing, trimming and mitering to any angle. It can be used for grinding and surfacing by attaching the standard alundum wheel; also for drilling with the geared drill chuck attachment. Other attachments applicable to this machine are listed below—all Standard Attachments as used on Miller Universal, Heavy-Duty or Special-Purpose Saw-Trimmers.

Either in the large or small shop the Miller Printer's Bench Saw-Trimmer is a tool of real productivity, insuring maximum output with minimum labor. In the very large newspaper offices, where more than one Miller is required for slug cutting during "rush" hours, in the linotype trade composition plant where slug cutting only is required, in the small and medium size shop where one machine will take care of the countless little odd jobs formerly done by hand in a botchy way, or perhaps not done at all, the Miller Printer's Bench Saw-Trimmer conserves time and labor, speeds up production, improves quality of work and converts into profits many of the items that now go as expense and waste.

## SPECIAL ATTACHMENTS

"Anyang" Lighting Fixture	.....	shown on page 44
6-Point and 4-Point 5-inch Brass Saws and Grinding Attachment	.....	shown on page 19
Right-Hand Miter Vise, complete	.....	shown on page 19
Extension Point End Gauge, complete	.....	shown on page 21
Register Gauge, complete	.....	shown on page 21
12-Point Attachment for Work-holding Vise	.....	shown on page 21
Line Holders, any size, 5-Point to 36-Point	.....	shown on page 23
Glass Guard	.....	shown on page 23
Geared Drill Chuck, fitted to saw arbor	.....	shown on page 23
5-inch Special Brass Saw, 4, 6 and 12 points only, with head, complete	.....	shown on page 27
6-inch Surfacing Discs	.....	shown on page 29
Point End Gauge with 60-Pica Finger	.....	shown on page 31
Trimmer Knife Grinding Attachment	.....	shown on page 31
Extension Feet for Miller Work-holding Vise	.....	shown on page 33
Cabinet Stand	.....	shown on page 36

NOTE: No other attachment shown in this catalog can be applied to the  
Miller Printer's Bench Saw-Trimmer.

# STANDARD SUPPLIES FOR MILLER SAW-TRIMMERS

## STANDARD and STEREOTYPE SAWS



STANDARD SAW



STEREOTYPE SAW

For cutting Linotype slugs, wood, mounted and unmounted electrotypes, stereotypes, lead, slugs and type metal.

Code:			
Absc15	5-inch Standard Saw and Head with Trimmer Knives, complete	.....	\$ 9.00
Absc16	5-inch Standard Saw Blade with Screws	.....	3.00
Absc18	5-inch Stereotype Saw and Head with Trimmer Knives, complete	.....	10.00
Absc19	5-inch Stereotype Saw Blade with Screws	.....	4.00
Absf18	6-inch Standard Saw and Head with Trimmer Knives, complete	.....	10.00
Absf19	6-inch Standard Saw Blade with Screws	.....	4.00
Absf20	6-inch Stereotype Saw and Head with Trimmer Knives, complete	.....	11.00
Absf21	6-inch Stereotype Saw Blade with Screws	.....	5.00
Absg	Saw Head (for either 5-inch or 6-inch Standard or Stereotype Saws) with Trimmer Knives	.....	6.00
Absf22	Extra Trimmer Knives (for either 5-inch or 6-inch Standard or Stereotype Saws) each	.....	.50
Absf23	Extra Trimmer Knife Plugs (for either 5-inch or 6-inch Standard or Stereotype Saws) per set of three	.....	.75
Absf24	Extra Trimmer Knife Set Screws (for either 5-inch or 6-inch Standard or Stereotype Saws) per set of three	.....	.25
Absg	Extra Screws for either saw blade, per set of three	.....	.25

NOTE: These saws have swaged teeth, and must not be set by any other method than the Standard Saw Swage, illustrated and listed below.

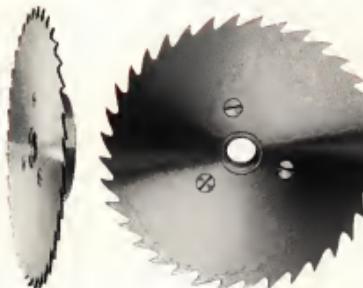
## STANDARD SAW SWAGE



For swaging teeth of standard saws before filing.

Code:			
Abspc	Standard Saw Swage	.....	\$1.50

Prices are F. O. B. Pittsburgh, and are subject to Change Without Notice.  
Supersede Prices in all Previous Editions.



## 6-INCH RIP SAW

For cutting wood lengthwise. Trimmer knives cannot be used with this saw.

Code:

<i>Abfipw</i>	6-inch Rip Saw with Plain Head and Screws, complete	\$9.00
<i>Abfrw</i>	6-inch Rip Saw Blade with Screws	5.00
<i>Abfph</i>	6-inch Rip Saw Head	4.00
<i>Abfrx</i>	Extra Screws for Saw Blade, per set of three	.25

## SWIVEL GAUGES



Code:

*Abgad* Swivel Gauge, 0 to 60 Picas, applicable to all types of Miller Saw-Trimmers, price each ..... \$30.00



Code:

*Abgaw* Swivel Gauge, 0 to 134 Picas, applicable to all types of Miller Saw-Trimmers, price each ..... \$35.00



## MITER VISE

Used in conjunction with Work-holding Vise for holding material while miting.

Code:

*Abgvg* Miter Vise ..... \$2.25

## BATTER AND LOCKING SCREW



For jogging material into alignment with end gauges. Used also as a rip saw gauge.

Code: *Abgb* Batter and Locking Screw, complete ..... \$2.50

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## "HOLDTITE" REMOVABLE WORK-HOLDING VISE



For holding material while sawing and trimming. Minimum capacity of this vise is 24 points.  
(For holding material less than 24 points, see 12-point attachment.)

Code:	A69d1	Removable Work-holding Vise, complete . . . . .	\$25.00
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## TRIMMER KNIFE FOR 5-INCH AND 6-INCH STANDARD SAWS



Code:	A69db	Trimmer Knife for Standard Saw, each . . . . .	\$ .50
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## TRIMMER KNIFE FOR 6-POINT AND 4-POINT 5-INCH BRASS SAWS



Code:	A69b	Trimmer Knife for Brass Saw, each . . . . .	\$ .50
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## KNIFE FOR BEVELER HEAD



Can be ground for any bevel desired.

Code:	A69e1	20° Knife for Beveler Head, each . . . . .	\$ .50
Code:	A69e2	30° Knife for Beveler Head, each . . . . .	\$ .50

## KNIFE FOR RABBETING HEAD



The various shapes may be maintained in sharpening by grinding on flat Alundum Wheel.  
To secure a keen edge, trimmer knives should be stoned on oil stone after grinding.

Code:	A69rg	Knife for Rabbeting Head, each . . . . .	\$ .50
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## DRILLS



A keen, sharp point may be maintained by grinding on flat Alundum Wheel.  
It is not necessary to stone drills after grinding.

Code:	Size	Price
<i>Abgj</i>	6-Point	\$ .75
<i>Abgk</i>	8-Point	.75
<i>Abgo</i>	10-Point	.75
<i>Abgp</i>	12-Point	.75
<i>Abgpv</i>	18-Point	.75

## ROUTER BITS



For wood, soft metal, soft zinc, etc.

For hard zinc.

For copper.

Standard Router Bits furnished, with the Miller Router and Jig-Saw Attachment are designated by the letter "A" and are adapted for cutting wood, electrotypes, stereotypes and soft zinc. For cutting hard zinc, order bits designated by the letter "B." For cutting copper, order bits designated by the letter "E." Sharpen router bits by grinding shaped end of bit only on flat alundum wheel. Original angle must be preserved. It is unnecessary to stone router bits.

## STYLE A

Code:	Size	Price
<i>Abgrw</i>	1/8-inch	.35
<i>Abgrx</i>	3/16-inch	.35
<i>Abgy</i>	1/4-inch	.35
<i>Abhuu</i>	5/16-inch	.35
<i>Abho</i>	1/2-inch	.85
<i>Abhp</i>	5/8-inch	1.10

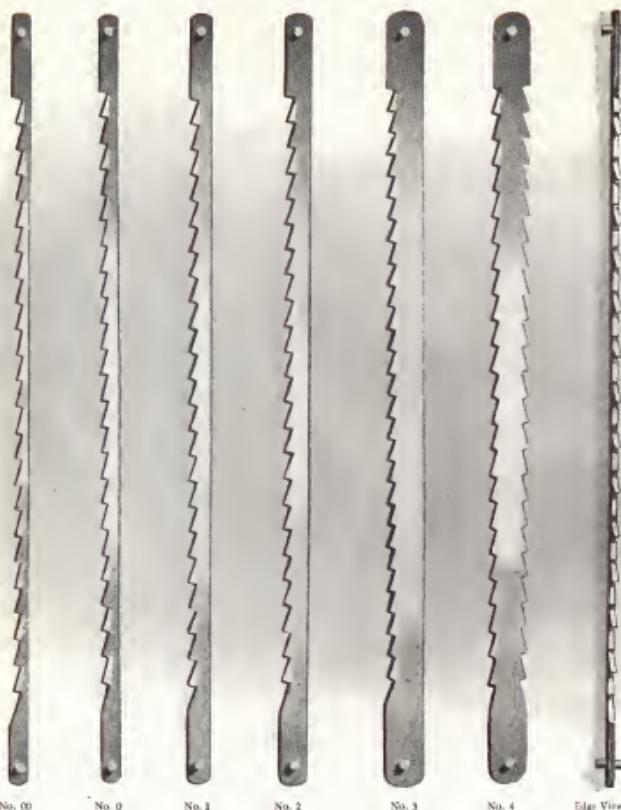
## STYLE B

Code:	Size	Price
<i>Abhdg</i>	1/8-inch	.35
<i>Abhe</i>	3/16-inch	.35
<i>Abhfs</i>	1/4-inch	.35
<i>Abhg</i>	5/16-inch	.35

## STYLE E

Code:	Size	Price
<i>Abhw</i>	1/8-inch	.35
<i>Abhv</i>	3/16-inch	.35
<i>Abhw</i>	1/4-inch	.35
<i>Abhx</i>	5/16-inch	.35

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No. 00

No. 0

No. 1

No. 2

No. 3

No. 4

Edge View

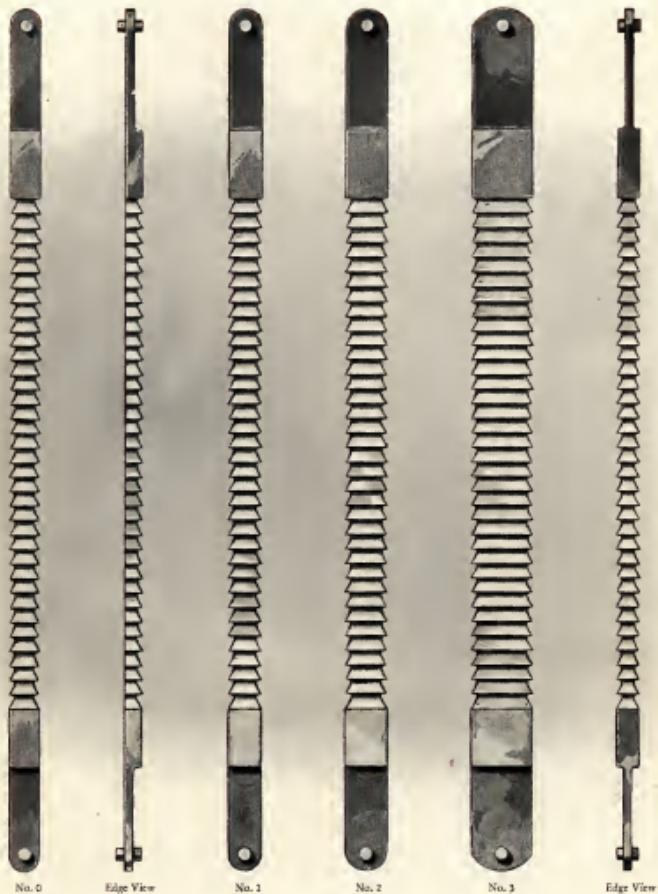
## JIG-SAW BLADES

Code	Jig-Saw Number	Width in Points	Thickness in Points	Pitch in Points	Hole-Saw will Enter	Price Each	Price Per Doz.
<i>Abby</i>	00	7	2	12	10-pt.	\$ .25	\$2.00
<i>Abbyng</i>	0	9	2	12	10-pt.	.25	2.00
<i>Abbias</i>	1	11	2	12	12-pt.	.25	2.00
<i>Abbis</i>	2	14	$2\frac{1}{8}$	12	18-pt.	.25	2.00
<i>Abbig</i>	3	18	$2\frac{1}{2}$	12	18-pt.	.25	2.00
<i>Abbid</i>	4	18	$2\frac{1}{2}$	12	18-pt.	.30	2.25
<i>Abbid</i>	*5	14	4	12	18-pt.	.30	2.25
<i>Abbid</i>	*6	18	$2\frac{1}{2}$	6	18-pt.	.25	2.00

\*Same as No. 2 except 4-points in thickness.

\*\*For stereotype metal—same as No. 3 except one-half number of teeth.

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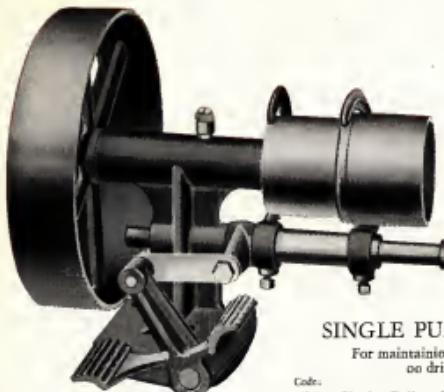


### BROACHES

Finishing tools used to square the walls of inside mortises. In wood, wood-mounted electro-s and stereos, the maximum cut should not exceed one point. In wood-mounted halftones, zincs, and solid metal bases the maximum cut should not exceed one-half point.

Code	Beach Number	Width in Feet	Thickness in Feet	Pitch in Feet	Cutting Faces	Price Each
<i>Above</i>	0	14	6	6	Three	\$3.00
<i>Abof</i>	1	14	9	6	Four	3.00
<i>Above</i>	2	18	9	6	Four	3.00
<i>Above</i>	3	26	9	6	Four	3.00

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## COUNTERSHAFT

Attached to column with belt to saw-arbor. Belt shifter is operated by the foot allowing operator's hands to be free to handle the work while starting and stopping the machine.

Diameter, driving pulley, 9 inches.

Speed, driving pulley, 800 r. p. m.

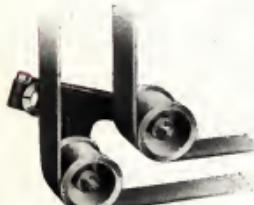
Diameter, loose pulley, 2½ inches.

Diameter, tight pulley, 3¼ inches.

Code:

*Absiu* Countershaft, complete for Universal and Special-Purpose Saw-Trimmers. \$28.00

*Absu* Countershaft, complete for Heavy-Duty Saw-Trimmer. \$30.00



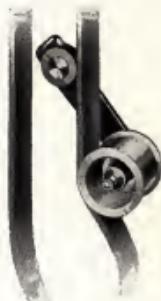
DOUBLE PULLEY IDLER

## SINGLE PULLEY IDLER

For maintaining proper tension  
on drive belt.

Code.  
*Absix* Single Pulley Idler, complete for Universal, Serial number 1 to 4630 inclusive, and Special-Purpose, Serial number 1 to 5231 inclusive. \$5.00

*Absifw* Single Pulley Idler, complete for Universal Serial number above 4630, and Special-Purpose Serial number above 5231. \$5.00  
(Not required on late models Universal and Heavy-Duty.)



SINGLE PULLEY IDLER

## DOUBLE PULLEY IDLER

Used where drive is located  
in rear of machine.

Code.  
*Absy* Double Pulley Idler, complete for all models Universal, Special-Purpose and Heavy-Duty Saw-Trimmers. \$7.50

## MISCELLANEOUS SUPPLIES

<i>Absic</i>	"Anyangl" Lighting Fixture for Universal Saw-Trimmer . . . . .	\$7.50
<i>Absig</i>	"Anyangl" Lighting Fixture for Heavy-Duty Saw-Trimmer . . . . .	7.50
<i>Absly</i>	"Anyangl" Lighting Fixture for Special-Purpose Saw-Trimmer . . . . .	7.50
<i>Absen</i>	"Anyangl" Lighting Fixture for Printer's Bench Saw-Trimmer . . . . .	7.50
<i>Absan</i>	4 x 3½-inch Alumnum Wheel . . . . .	1.25
<i>Absap</i>	Skived Leather Belt with Ends prepared for gluing (stave length) . . . . .	4.00
<i>Absaq</i>	Standard Saw File, each . . . . .	.50
<i>Absar</i>	Piller File, each . . . . .	.50
<i>Absas</i>	Router Belt, Elastic, for Universal Saw-Trimmer, each . . . . .	.25
<i>Absaw</i>	Router Belt, Elastic, for Heavy-Duty Saw-Trimmer, each . . . . .	.25
<i>Absay</i>	Router Belts, Elastic, for Universal Saw-Trimmer, per doz . . . . .	2.25
<i>Absaz</i>	Router Belts, Elastic, for Heavy-Duty Saw-Trimmer, per doz . . . . .	2.25
<i>Absau</i>	Countersink, each . . . . .	1.00
<i>Absay</i>	Type-High Gauge . . . . .	1.50
<i>Absaz</i>	Fiber Driving Pinion for Router and Jig-Saw . . . . .	4.00
<i>Absay</i>	Aluminum Saw Hood with Bolt and Nut for Universal, Special-Purpose and Printer's Bench . . . . .	4.00
<i>Absaz</i>	Aluminum Saw Hood with Bolt and Nut for Heavy-Duty Saw-Trimmer . . . . .	7.00
<i>Absy</i>	Punch . . . . .	.35
<i>Absy</i>	Hammer . . . . .	.90
<i>Absy</i>	Oil Stone . . . . .	1.00
<i>Absy</i>	Screw Driver . . . . .	.35
<i>Absay</i>	Brush . . . . .	.65
<i>Absaz</i>	Machin Oil Can . . . . .	.75
<i>Absay</i>	Sperm Oil Can . . . . .	.50

For parts and supplies not listed see detail diagram of machine furnished with equipment, and  
to users upon application.

Prices are F. O. B. Pittsburgh, and are subject to Change Without Notice.  
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# ELECTRICAL EQUIPMENT

THE motors listed below have proved especially adaptable to the particular requirements of Miller Universal, Heavy-Duty and Special-Purpose Saw-Trimmers. They are of ample power and fully guaranteed.

## DIRECT CURRENT MOTORS

Furnished in 110, 220 or 500 volts.

## ALTERNATING CURRENT MOTORS 60-CYCLE

Furnished in 110 or 220 volts, single-phase. Furnished in 110, 220 or 440 volts, 2-phase. Furnished in 110, 220 or 440 volts, 3-phase. Prices of Miller Saw-Trimmers with motors to operate on 25-, 30-, or 40-cycle circuits furnished on application.

## MOTOR PROTECTION

All direct and alternating current motors are enclosed as much as possible.

The openings in frames are designed to allow air circulation, and are absolutely necessary.

## STARTING BOXES

Starting boxes are furnished for 500-volt direct current motors only.

Starting boxes are not required with direct or alternating current motors below 500 volts, and are not furnished.

## SIZES OF MOTORS

Miller Printer's Bench Saw-Trimmer  $\frac{1}{4}$ -H. P.  
Miller Universal and Special-

Purpose Saw-Trimmers .....  $\frac{1}{2}$ -H. P.  
Miller Heavy-Duty Saw-Trimmer.  $\frac{3}{4}$ -H. P.

# GUARANTEE, TERMS, ETC.

## GUARANTEE

We guarantee Miller Saw-Trimmers and their attachments to be perfect in every particular at time of loading.

## TERMS

(Applying to initial purchases of Saw-Trimmers, Router and Jig Attachments and Supplies purchased with machines only. Subsequent purchases of Supplies and Parts are Net cash 30 days.)

All prices f. o. b. Pittsburgh, Pa.

Cash, less 5% when paid within 10 days of date of invoice.

Cash, less 2% when paid within 30 days of date of invoice.

Miller Universal, Heavy-Duty and Special-Purpose Saw-Trimmers—One-fourth Cash. Balance in twelve equal monthly interest bearing notes secured by chattel mortgage, or lease, covering entire equipment, said notes to be written in series running four months.

Miller Printer's Bench Saw-Trimmers—One-fourth Cash. Balance in three equal bi-monthly interest bearing notes secured by chattel mortgage, or lease, covering entire equipment, said notes to be written in series running four months.

## DIDOT SYSTEM

Unless otherwise ordered, gauges cut to the American Point System will be furnished. Gauges cut to the Didot Pointe System without extra cost.

## ATTACHMENTS

Any attachment, not purchased with the standard equipment, may be ordered at any subsequent time and will fit perfectly as all parts are made to interchange. No machine work or tools, other than those that are furnished with the standard equipment, are required to apply any of the attachments; in operation, all changes are made with the hands without the aid of tools.

## SUPPLIES

In ordering parts or supplies, state Serial Number of Saw-Trimmer to which same are to be applied.

## WEIGHTS

Universal or Special-Purpose Saw-Trimmer with motor, crated (approximately).....	400 lbs.
Universal Router and Jig-Saw Equipment, boxed (approximately).....	125 lbs.
Heavy-Duty Saw-Trimmer with motor, crated (approximately).....	600 lbs.
Heavy-Duty Router and Jig-Saw Equipment, boxed (approximately).....	145 lbs.
Printer's Bench Saw, with motor, boxed (approximately).....	225 lbs.
Cabinet Stand for Printer's Bench Saw-Trimmer, crated (approximately).....	175 lbs.

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